SUBSTANCE OF A

Clinical Lecture

ON

CASES OF ACUTE ATROPHIC PARALYSIS IN INFANTS AND ADULTS

(ACUTE ANTERIOR POLIO-MYELITIS).

Delivered at the National Hospital for the Paralysed and Epileptic, on Dec. 9th, 1880,

BY THOMAS BUZZARD, M.D., F.R.C.P.

LECTURE II.

GENTLEMEN,—Some thirty years ago Marshall Hall applied the term *cerebral paralysis* to that condition in which a lesion cuts off the cerebral influence, and *spinal paralysis* to that in which a lesion cuts off the spinal influence from the paralysed limbs. The first patient before you (a case of ordinary left hemiplegia) is an example of cerebral paralysis. He has but very small power of moving his left arm. His deltoid muscle, which is plump, responds readily, however, as you see, to induced currents of moderate strength. The other man (a case of acute anterior polio-myelitis affecting both arms, whom Dr. Jackson and Dr. Ferrier have kindly permitted me to show you) is an example of spinal paralysis. His deltoid muscle is wasted, and refuses to react to the strongest induced currents. When, however, I apply to it a current from twenty cells of Coxeter's battery, and slowly interrupt this, there is vivid contraction of the muscle. This, the "reaction of degeneration" is shown also by a certain qualitative change which I can demonstrate to you. In health the sudden closure of a voltaic circuit of moderate strength, whilst the kathode (or negative pole) is on a muscle, causes a slight contraction, which is represented, according to Brenner's formula, as KSz (Kathode, Schliesxung=shutting; Zuckung=contraction). When the current is increased a stronger contraction occurs, KSZ (represented by a large Z), and in addition a slight contraction now also takes place when the circuit is either opened or shut with the anode, or positive pole, on the muscle, AOz, ASz (Oeffnung=opening). But in this patient, as you see, the contraction when the circuit is made with the anode on the muscle is considerably stronger than that with the kathode. So we record the electrical reaction in this man's deltoid as Far. =0, Galvan. ASZ > KSZ.[1]

This is a characteristic example of a qualitative change in the reaction of degeneration.

The *diagnosis* of this disease is not usually difficult. A febrile attack followed by rapid loss of power in one or more limbs points almost conclusively in children to acute anterior polio-myelitis if you find in the course of a week that many of the muscles paralysed exhibit lost or greatly reduced faradaic excitability. There is just the chance, however, that you may be concerned with a traumatic or other lesion of a single nerve-trunk. The child may have been exposed to cold, and a nerve of the lower or upper extremity may be affected, as the portio dura so often is from this cause. In such a case there would be paralysis, wasting, and loss of faradaic excitability exactly confined within the district of a certain nerve. But in anterior polio-myelitis muscles in the districts of different nerves are liable to be affected; and, again, all the muscles in a particular nerve-district are not equally affected. The possibility of pachymeningitis must also be excluded. This is more gradual in its progress, and will be attended by severe pains and cutaneous anæsthesia. Otherwise the symptoms resemble, for there is paralysis, wasting, and reaction of degeneration. It is still more difficult to exclude disease of the anterior roots alone, which, however, is rare. The attendant circumstances will probably aid the diagnosis.

I saw some time ago a child, one year old, who was said to have lost the use of the right lower limb the day before, after a little malaise and fever. When stripped it was evident that the limb was powerless, and it was also tender, for the child protected it from being touched. The aspect was much that of infantile paralysis. There was no fracture. But its urine abounded in uric acid, and it seemed the child had been fed for a long while on a milk food which contained an enormous quantity of sugar. I thought it likely there might be some inflammation of the loose connective tissue between the muscles of the thigh, caused by the deposit in it of uric acid. (These collections of tissue, according to recent investigations, are really extensions of the lymphatic system.) A few doses of citrate of potash cured the child in a day or two. Such a cause is probably at the bottom of those cases of sciatica and lumbago which are rapidly cured by purging and alkalies. I owe to Dr. Burdon-Sanderson the idea that deposits in these extensions of the lymphatic system might lead to symptoms of this kind.

Arthur D——, aged eighteen, came here on account of nervous symptoms, from which he has recovered; but, as you see, he exhibits the results of a paralytic attack, which he describes as having occurred in infancy. There is want of power in the *left leg, right arm*, and, what is especially notable, the *right side of the face*. Now, if this were a case of alternate hemiplegia (from disease of the lower part of the pons Varolii), the left arm (not the right) ought to have been paralysed. Moreover, any wasting in the left lower limb as a result of disuse would have been proportionate above and below the knee. But you will observe that whilst the left thigh is three inches, the left calf is only a quarter of an inch less than its fellow. Moreover, the wasting involves the district of the anterior crural nerve and only a part of that of the sciatic. The patellar tendon-reflex is absent on the left side. The case is evidently one of acute polio-myelitis, involving not only the spinal centres for the left leg and right arm, but also the nucleus of the portio dura (for the right side) in the medulla oblongata, which, with certain other nuclei, is continuous upwards and homologous with the ganglion-cells in the anterior horns of the cord. It is, I think, extremely rare to find the complication of facial paralysis in this disease. May not this be because if the affection invades the medulla oblongata at all, it is liable to attack centres essential to life? I would suggest the possibility that some cases of rapid death in previously healthy persons (for which no explanation is found) may be due to acute polio-myelitis attacking the cardiac and respiratory centres.

B——, aged twenty (patient of Dr. Ormerod), came here for fits, but incidentally mentioned having been paralysed in the left leg in infancy. The other limbs, he said, had nothing wrong. You will see, however, now that he is stripped, that the right leg is really not much more developed than the left, and the patellar tendon-reflex is absent on that side as well as the other. A short time since I saw a young man who had been paralysed in the left leg from infancy, all four limbs having, according to his account, been at first affected, but the others having quite recovered. Examination showed the tendon-reflex absent in both legs, and the faradaic excitability (which was quite lost in the left leg) greatly reduced in the supposed sound limb. Helena M——, a child now attending, who was brought here on account of paralysis, supposed by her mother to affect the right leg exclusively, has no patellar tendon-reflex in *either* leg, and certain muscles in the left leg will not react to either current. I am disposed to think that monoplegia in this disease is far less common than is usually stated, and that, as in these cases, limbs are very frequently supposed to be sound which are, in reality, only comparatively so.

As regards *etiology*, the influence of cold and of injury to the back, as causes, is supported by evidence. Alcohol is probably not a cause. The disease occurs most frequently in those (infants and children) who have never taken any. Let me note also a curious fact as regards some adult cases. George B——, aged twenty-one, has totally abstained for eight years. Mary F——, aged sixteen, has taken little or none in her life. A young lady whom I saw lately in consultation, and of whom I asked the question, had taken no alcohol for five years.

The *prognosis* is very important. Duchenne's observations,

[1] Let me appeal to English-speaking neurologists to adopt the German notation for these qualitative changes. If we use the word "shutting" instead of "closing" as regards the circuit, and accept the letter Z as an arbitrary sign implying contraction (and there is something in the form of the letter suggestive of it), records made by English and German will be mutually intelligible without the necessity of that kind of wearisome translation of which we have already quite enough in respect to thermometrical and mensurational notation. The Germans have set us the example by employing the terms anode and kathode devised by Faraday.

and F. Müller's more recently, tend to show that all muscles in which faradaic excitability has disappeared entirely in the first four or five days are permanently paralysed. In all those in which some faradaic excitability is retained after from the eighth to the twelfth day, motility may be expected to return even though several months may be required. You cannot judge of the future from the existence of reaction of degeneration in the first stage, nor even, as it seems to me, from the disappearance of reaction to both currents. In the patient Mary F——, aged sixteen, who was attacked with polio-myelitis affecting both lower extremities nearly a year ago, four months after the attack the right quadriceps extensor showed no reaction to *either current*; it now reacts freely to twenty cells. In another, Geo. B——, aged twenty-one, whom I present to you, you have the opportunity of comparing his present condition with a note taken by Mr. Broster eleven days after his attack of polio-myelitis twenty-six months ago, when he came into the hospital. There was then no reaction to faradaism in any muscle of both *lower extremities*, except the left vastus internus. Those of the *left arm* acted to somewhat strong currents. The muscles of the lower limbs acted to slow interruptions of fifteen cells constant current. At that time, in the *left* lower extremity the only movements practicable were flexion of the thigh on the trunk and rotation of it inwards and outwards; in the *right* limb a very slight flexion of the toes. The left arm was weak and wasted. The patellar tendon-reflex, as well as the skin-reflex from the soles, was absent on each side. Three months later the *right* lower limb still remained motionless and wasted. He could now draw up the left leg and lift the left foot off the bed. The left arm had recovered. A month more and the wasting process had ceased; the thighs and legs had recovered two inches of girth, which they have never since lost. At this time the left quadriceps extensor reacted to faradaism. Thirteen months after the attack he could flex the *right* leg a little on the thigh, but could not extend it; could adduct but not abduct it. The patellar tendon-reflex had returned in the left leg, not in the right. More than a twelvemonth has passed since that observation was made. It is very interesting to see that he has still further, though but slightly, improved. He can now extend the right leg a little and flex it readily. There is no reaction to faradaism, however, in the quadriceps of the right side, and the contraction to a strong constant current is slight. In the left quadriceps there is still reaction of degeneration and ASZ>KSZ.

Were I called upon to treat a case of this disease from the first I should keep the patient in bed for many months. During the first few hours, if possible, ergot should be given frequently in large doses, but not continued after a week. The muscles should be tested electrically in the course of the second week, for purposes of prognosis. A mild constant current (stabile) might be used for five minutes to the spinal cord three times a week, taking care not to give shocks. Any energetic electrical treatment should, however, be avoided. When any tendency to contraction and consequent deformity showed itself, I would let the patient wear in bed some light apparatus to compensate for the paralysed muscles, and I would particularly discourage strenuous attempts at voluntary movement of paralysed muscles, as tending to excite action in their antagonists, and thereby increase the deformity.

REMARKS ON THE PERITONEAL TUBERCULOSIS OF CHILDREN.

BY GEORGE GARLICK, M.D. LOND.,
LATE REGISTRAR, HOSPITAL FOR CHILDREN, GREAT ORMOND-STREET.

THE disease which has as its essential lesion a deposit of tubercles in the peritoneum simulates in its different forms some other diseases. Thus at one time it may be quite latent throughout its course, at another produce a subacute peritonitis; now showing ascites as its most prominent symptom, and again feigning in its large tumours and nodules a case of malignant disease. Various classifications of it have been offered by different authors. Thus, Drs. Wilks and Moxon in their Pathological Anatomy describe three forms—1. Tubercular ascites. 2. Latent peritoneal tubercle. 3. Cases of inextricable union of the bowels and viscera to one another, and to the abdominal parietes. Dr. Bristowe, in "Reynolds's System of Medicine," separating those cases which present obvious indications of abdominal disease, gives two classes—1st. Acute, often resembling enteric. 2nd. Chronic, in which at some period ascites is usually present. In "Ziemssen's Cyclopædia of Practical Medicine," following Kanlich, three groups are distinguished—1st. Acute onset; fitful course; absence of effusion; diffused adhesions and points of resistance. 2nd. Latent onset; ascites the most prominent symptom, and causing others; tumours in the abdomen. 3rd. Like Class 2, but with temporary subsidence of symptoms. Dr. West, in his "Diseases of Infancy and Childhood," classifies according to their symptoms and rapidity of course. Other divisions of the subject have been made by the numerous writers, but they need not be here mentioned. The chief value of these classifications appears to be that they characterise and help to keep in mind the various forms of the malady; they do not aim at an exact scientific basis of division, partly on account of the difficulty that arises in diagnosing the frequently complex conditions, but also because of the doubtful position of cases which present large deposits of caseous material in the peritoneum, the point at issue being whether these ought to be considered as simple, or as tubercular peritonitis.

So as the subject labours under this difficulty the mode of division must be mainly clinical, and we may distinguish the following classes:—

1st. Latent cases of tubercle in the peritoneum—(*a*) part of a general tuberculosis, (*b*) secondary to tubercular ulcers but purely local.

2nd. Cases characterised by an ascites, which may mask all other conditions.

3rd. Those in which obvious, and often very large, tumours are found, and in a belly not otherwise markedly resistant.

4th. In which all the abdominal contents and abdominal wall are mutually and inextricably united, often with attendant intercommunication of different parts.

5th. Mixed cases, showing diffused adhesions and points of resistance, and running a variable course.

It might be thought that Classes 2 and 3 should be combined, as, indeed, they are in most classifications. They are separated here because a large collection of fluid will prevent the palpation of tumours, and also because some cases showing abdominal indurations have had no effusion throughout their course. The classes have been made strongly contrasting for the avowed object of showing the different aspects of the disease.

1st. The latent form is probably the most frequent, but has nothing to do with the cause of death. Its latency results either from the absence of inflammatory change, or from the obscuring of its symptoms by the more grave affections of other organs. The chief interest attaches to the question of the existence of tubercular ulceration. Pus can be demonstrated in the stools even when the area of ulceration is small, and occasionally the stool may be almost entirely composed of pus; but simple ulceration may yield stools quite identical in character with the preceding. The general aspect of a case of tubercular ulceration was found in another case, post-mortem, to have resulted from albuminoid degeneration of the villi of the small intestine, there being no such change in the liver and kidney. In this case the question arose, whether an ordinary catarrhal diarrhœa might not thus perpetuate itself. I am not aware that this possible cause of an intractable diarrhœa has been worked out.

2nd. Although most authorities state that some effusion of fluid is found during the course of most cases of tubercular peritonitis, this is said to be small in amount, the fact not being usually enunciated clearly that the amount may be so considerable as to produce symptoms of its own—as œdema of the feet and abdominal walls, enlargement of the veins of the abdominal wall, &c. This fact is mentioned by Murchison, who suggests that in these cases there may be a deposit in the portal lymphatics pressing on the portal veins. Be this as it may, a complete and rapid absorption frequently takes place, and it is quite remarkable to see how the child will pick up in health and strength. A little girl, aged six years and a half, who presented marked symptoms of ascites, with a tense and œdematous abdominal wall, had the abdomen reduced whilst under observation 4½ inches in circumference—that is, from 29 to 24½ inches, all signs of fluid

disappearing; and, as is frequently the case, an indurated band then became palpable; the child was then transferred to the country, and returned looking well, but with the band still existing. Sometimes the fluid thrown out is pus, and an abundant discharge occurs from the navel, this continuing for months.

3rd. Tumours are found—that is, well-defined masses, not mere local sensations of resistance. Their situation and shape varies greatly. What is most characteristic is a hard, transverse, ruler-like band, situated about or above the navel, sometimes stretching right across the abdomen, losing its definition at its extremities, or passing into other masses. I have measured one of these, more than eight inches in length. The abdomen in which they are found looks large, and with frequently well-nourished walls, yielding little or no resistance on pressure; and the readiness with which the hand rolls over the band, gives no idea to the touch of an obliterated peritoneal cavity, with closely adherent viscera, such as is found in the following class of cases. A tumour of this kind is usually due to a thickened and rolled-up great omentum; to produce this the process must be chronic and localised, else adhesions form and keep the membrane extended out when either a general resistance is felt or an irregular tumour in front of the abdomen. In the acuter cases, in which there is frequently an opportunity of making a post-mortem, the great omentum may be half an inch thick, with a mass having the granular aspect of aggregated tubercle. In one chronic case I have seen masses like congealed fat or suet and quite structureless, and situated in the omentum, mesentery, and retro-peritoneal tissue; whether these latter cases are to be considered as tubercular it is at present difficult to decide. In a case reported by Dr. Hilton Fagge, in which tubercular peritonitis was mistaken for ovarian disease and operated upon, the peritoneum was found strewn with tubercles and the intestines matted together, still recovery occurred, and six years later the patient was seen fat and well; this shows a power of recovery from extensive tubercular deposit which should make one slow in arguing against their tubercular origin from the mere recoverability of the case. A mass is found frequently in the right iliac fossa, due to thickening of the cæcal wall combined with some enlarged glands here, and general thickening and adhesions of the surrounding peritoneal covering; this is not an uncommon lesion, and results from the fact that a chronic and sub-localised tubercular ulceration is frequently found about the cæcum, and leads to few symptoms but wasting and fever. Enlarged mesenteric glands have been mentioned here as forming part of the tumour, and in fact they often cannot be diagnosed from other masses, but they are not very often felt and still less often demonstrated post-mortem after being felt; but this is due largely to the fact that these cases often recover. It is curious to see the disproportion often existing between the amount of tubercular disease of the bowel, &c., and the enlargement of the mesenteric glands; thus the peritoneum may be strewn with tubercle, and there may be deep ulceration of the cæcum and of Peyer's patches above, with only moderate enlargement of the mesenteric glands; the great enlargement also which occurs in some cases without any such origin contrasts strongly with the preceding. These cases have also to be diagnosed from cancer of the peritoneum and fæcal accumulation.

The following case may be given as an example of this class:—

Alice C——, aged three years and a half, admitted on April 26th, 1878, into the Hospital for Sick Children, under the care of Dr. Gee. The mother's account was that another of her children had died of consumptive bowels. Alice was subject occasionally to attacks of vomiting and diarrhœa, and for the last three weeks the diarrhœa had been much worse, slime and blood being passed with much abdominal pain; at the same time the appetite was good, and there was no great loss of flesh. The bowel often prolapsed. On admission the child was pale, anæmic, and flabby, but with a fair amount of flesh. The stomach was remarkably large and inflated, but could be readily palpated, yielding no resistance anywhere, and had yielded at the navel, forming a small rupture. Liver about two inches below the ribs on right nipple line; spleen not palpable; the tongue was moist and clean, but pale. The bowels were moved frequently, the motions being offensive, pultaceous, and composed largely of curds with a little slime. Dr. Gee examined them microscopically, and found partially digested muscular fibres, with a few doubtful cells, probably mucous corpuscles. She was dieted on Swiss milk, raw meat, biscuits and toast, and for medicine took one drachm of compound decoction of aloes three times daily. For three months treatment varied from time to time, was kept up most assiduously, but with little decided result, except that some days the motions were more solid and improved in colour, and the child's general condition was rather better. During this time the spleen enlarged, and towards the end a crop of boils appeared on the head, the child for the first time becoming febrile. Rather more than three months from admission a band appeared, transversely placed, a little above the navel. The child was then sent to Highgate, as it did not improve, the band remaining quite distinct. Part of the treatment employed may be mentioned here, owing to the marked success that it has in cases of chronic diarrhœa in which all else has failed; it was the constant wearing next the abdomen of a large piece of spongio-piline, moistened twice daily with a mixture of two drachms of tincture of iodine and eight ounces of camphor water; it is a most valuable agent.

4. Universal firm adhesions. This, when combined with perforations of the gut and intercommunication, converts the abdomen into a trabeculated cavity. It is amongst these cases we find the character of abdomen so often described—the pigmented, scaling, thin-walled belly, with its wasted, tendinous-feeling muscles, its hard subcutaneous points, and a feeling of tense resistance, due to the immobility of its contents, &c. This fixation of the contents may be felt also in the almost stationary lower edge of the liver during inspiration; this sign often fails from the elevation of that organ above the margin of the ribs. The elevation of the heart at the same time, combined with a retraction of the lung, may so elevate the cardiac dulness as to suggest the existence of enlarged mediastinal glands. Here, too, we have often the most marked symptoms, the extreme degrees of emaciation, with diarrhœa and attacks of severe abdominal pains, leading to a speedy death. The following is a good example of a case of this class:—

Henry G——, aged nine years, admitted Dec. 9th, 1876, under Dr. Dickinson, into the Hospital for Sick Children, Great Ormond-street. There was phthisis in the families of both parents, and two other children had died of tubercular disease. This child had been ill nine weeks with abdominal pain and diarrhœa (the motions pale, and fermenting like yeast), occasional vomiting, cramps in the legs and feet, wasting, and night-sweats. He was a pallid boy, with long, light hair, markedly wasted, and with an anxious, drawn face. The abdomen, in contrast with the rest of the body, was tumid and tense, with distinct veins in the walls, and its rounded contour obliterated all the markings of health; a general want of resonance and resistance, but with no palpable tumours. The tongue clean, but red and irritable. About twice daily he passed a very large, diffluent, ash-grey, offensive motion. The chest showed consolidation of the left apex, and the heart was raised and uncovered, beating in the second and fourth spaces. The child only lived five weeks after this, having feverish attacks, frequently crying out with abdominal pain, progressively wasting, and having a cadaverous smell. After death extensive lung mischief was found. The abdominal contents were so glued together that the intestine could only be cut out in pieces, and at various parts apertures united contiguous parts of the bowel. The liver was firmly fixed all round, and highly fatty.

Great James-street, W.C.

THE ORIGIN OF CROSS-LEGGED PROGRESSION (SCISSOR-LEGGED DEFORMITY), ASSOCIATED WITH DOUBLE HIP-ANCHYLOSIS.

BY R. CLEMENT LUCAS, B.S. LOND., F.R.C.S.,
SENIOR ASSISTANT SURGEON TO, AND DEMONSTRATOR OF OPERATIVE AND PRACTICAL SURGERY AT, GUY'S HOSPITAL.

IN the paper which I read before the Clinical Society on October 22nd, directing attention to this peculiar deformity and odd method of progression, I stated that I particularly wished to hear discussed the theory of its origin, and to learn from others their views of its cause. The speakers in the discussion which followed did not agree as to the probable cause, and each theory put forward had much sound

reasoning to support it. I therefore desire to state concisely what those theories were, with the object of gaining further information on the origin of the deformity.

For such as may not have noticed the paper it may be well to state that the deformity is associated with, and maintained by, anchylosis of both hip-joints, in a position of extreme adduction and eversion. The legs cross opposite the knees, the heels are wide apart, whilst the toes are approximated, and the patients walk from the knees instead of from the hips.

The first theory, which may be called the simple *adduction* theory, received, if I understood aright, the support of Mr. Howard Marsh. It would attribute the deformity to the action of the adductor muscles having been unopposed during the process of repair. Adduction, as is well known, is very common in hip-joint disease, but it is usually associated with flexion and inversion. Adduction with extension and extreme eversion must be very rare, and for this reason the theory of unopposed muscular contraction did not appear to me to be altogether satisfactory.

Instances of flexion and adduction, with inversion, are occasionally met with in patients long bedridden, who have no hip-joint disease. They belong to an entirely different class to that which I have described, but may be used in support of the theory of simple muscular contraction. An extreme case of this kind is figured in Dr. Little's work on deformities. In this case there was semi-flexion and adduction, causing the thighs to cross above the knees, and, as can be seen by the engraving, inversion of the legs. The author relates the case as follows: "Another remarkable contracture from preponderance of one set of muscles and habitual retention in one position, is afforded by the subject of Fig. 74, which represents the case of a lady, aged fifteen, who seven years before laboured under severe typhus fever, during which extensive sloughs posteriorly, involving very nearly the whole of the sacrum and nates, and laterally exposing both trochanters, occurred. Probably through weakening of the glutei muscles, the adductors of the thigh habitually drew the limbs inwardly, and ultimately their contraction being unresisted by volition, crossed the limbs over each other, in which uncommon position they were rigidly fixed at the time of the author's first examination." In a note it is said "she had not walked since the original illness." In my cases there was extension with extreme adduction and eversion, and it is the accompaniment of extreme eversion with adduction which leads me to think that some volition or design determined, in part at least, the peculiar deformity I have described.

The second theory, which may be called the *gravitation* theory, was very ingeniously demonstrated by Mr. Croft. It was suggested that the first hip became anchylosed in an adducted position, and then, when afterwards the patient walked with the aid of crutches, the other limb fell naturally across the one fixed, in order that the line of gravity might be between them. Against this view it may be urged that a patient walking on crutches and one leg, in consequence of disease of the opposite hip, does not, as a rule, carry the lame leg in front or behind the other, but retains it in a semi-flexed position on its proper side. On the other hand, since writing my paper, I have seen a man walking with crutches and slightly crossed-legged, who had no hip disease. He had suffered during two or three years from partial paralysis of the right side. In this case the paralysed leg fell behind the sound one, and it might be argued that it was so placed by the action of gravity. It was in the man's power to abduct, flex, or place the lame leg in any position he pleased, but he found it most convenient for progression to carry it behind and a little to the outside of the other. When walking he received the weight of his body from the crutches first upon the weak limb, then quickly transferred it to the sound one before carrying forward his crutches to take the next step. This case, if used in support of the gravitation theory, would do away with the supposed necessity for the limb first attacked to be anchylosed in an adducted position, since any adduction of the sound limb in this case must have been voluntary.

The explanation of the course of events antecedent to anchylosis which I put forward as probable—not dogmatically, but rather to elicit comments—need not be regarded as opposed to either of the other views, but may be made to include both. It would leave to the patient a certain *natural selection* or *option*, which induces him to choose by preference a position that gives most rest to the inflamed hip, and afterwards leads him to maintain or even increase the deformity, because the position is one which allows most easy progression when both hips are anchylosed. Supposing one hip to have recovered sufficiently to bear the weight of the body, and the other hip to be in a state of acute inflammation, the patient will try to bear all his weight on the convalescent limb and endeavour to fix and rest the other. With crutches he is enabled to effect this. The limb last attacked, when carried across the other so that the patella of the latter fits into the popliteal space, is supported, fixed, and prevented from touching the ground. With lessening pain in the inflamed hip the patient becomes anxious to test its powers. He is conscious that any attempt to move the hip will cause him pain, and he accordingly tests its weight-bearing powers by dropping the foot to the ground on the spot over which it has been hanging. When assured of its power to sustain the weight of the body, he attempts to walk, and finds that the more the limbs are everted the more extensive is the movement emanating from the knees. Hence, first, for the purpose of relieving pain, and afterwards for convenience in walking, he habitually retains his limbs in a position which anchylosis eventually seals. I thought it an argument in support of this view that in both my cases the limb last attacked was the one carried in front, whereas in the case of the man suffering from partial paralysis, the weakened limb was carried behind the other; but since then Mr. Tyson has shown a man at the Clinical Society in whose case the limb last attacked was behind the other. Mr. Croft, in the discussion on my paper, pointed out that in the boy pathological dislocation had taken place in both hips without suppuration. Mr. Heath's inquiry as to the condition of the hips in the man led to the appointment of a committee, which has reported that in his case the hips are not dislocated. Thus dislocation is proved not to be the determining cause of the scissors-like deformity.

Finsbury-square.

FURTHER OBSERVATIONS ON STERTOR; ITS PATHOLOGY AND TREATMENT.

BY ROBERT L. BOWLES, M.D.

(*Communicated by* CÆSAR HAWKINS, F.R.S.)

(*Concluded from p. 972.*)

THE consideration last mentioned induced me to adopt position in all conditions of the lungs in which much mucus was secreted. In April, 1866, a little child, three months old, after having suffered from slight catarrh for a few days, was seized with difficulty of breathing at night. When I arrived in the morning the child was livid, the eyes sunken and half closed, and the pulse remarkably slow, feeble, and irregular. The child breathed with great difficulty, and had a loose mucous cough, feeble and ineffective. The quantity of mucus in the chest was so great that the child could not inspire, and appeared dying. It was turned on the right side, ammonia applied to the nostrils, and ten drops of brandy administered every quarter of an hour. On the following day it breathed with greater ease, the expression had improved, and the pulse, though still slow, had a little more power. The air now entered the left side freely, and the râles were few; no breathing at the right side. The child gradually recovered, but for several days there were bronchial breathing, and bronchial voice on the right side. Before the child was turned on the right side there was no difference on auscultation between the two sides.

In bronchitis generally, and especially in the bronchitis of the old, I endeavour to leave one lung free for breathing, and then, as vital power returns, the position is gradually changed.

In the *convulsions of children* there is often a large flow of saliva and secretion in the bronchial tubes. This becomes immediately churned into foam, and greatly impedes respiration. In the lateral position all this drains away, the breathing is freed, and I have often seen recovery commence immediately.

In *epilepsy* the fit will often cease at once by removing stertor, but here it requires a little more management than

placing the patient on his side, for the spasms of the mouth, tongue, and fauces require opposing by little mechanical contrivances.

In May, 1866, I was sent for to a phthisical patient, who was said to be dying from hæmorrhage. I found him lying upon his back, partially elevated by pillows, and apparently breathing his last. His face was cold and ghastly, his jaw dropped, and his eyes widely opened and staring. He made a few unsuccessful efforts to inspire, when some large mucous râles were heard in the trachea. The pulse could just be felt feebly flickering. He was immediately placed well over on the right side, and ammonia was applied to the nostrils. A little brandy-and-water was introduced into the mouth, but there was no effort to swallow. A handkerchief was, however, soaked in brandy, and a portion left in the mouth. The mouth and tongue were quite cold. In a minute or two the respirations became longer, and air could be heard entering the uppermost lung, but none entered the lower. Gradually the râles diminished in the upper lung, air entered more freely, and the percussion sounds became more resonant. Consciousness, which had been utterly lost, gradually returned, and by the following morning he was perfectly himself, and could have transacted any business. He lived four days, breathing with one lung only.

On our arrival my friend Dr. Lewis, who was with me, was so convinced that death must take place immediately that he thought all our efforts to prolong life would be useless and unavailing.

On the subject of drowning I do not propose to consider the various modes of resuscitation, but to comment merely upon the fluid contained in the lungs of drowned persons. The Committee of this Society on Drowning came to the conclusion "that it was the entrance of fluid into the lungs, and the effects thereby produced, which was the cause of death in drowning." Professor Caspar, as a result of his prolonged researches on drowned persons, asserts that as a rule water exists in the lungs in the form of fine vesicular foam, even in those who have never come to the surface after once being submerged.

In 1861 a woman who had been taken out of the Serpentine and treated by the hot-bath at the Receiving-house was brought to St. George's Hospital about one hour afterwards. Mr. Jones, the resident medical officer, states that on admission "her breathing was fair, with loud rattling noise; her lips were livid, her pulse *very good*, her surface and extremities very cold; she was sensible and able to speak." Warmth and appropriate measures were employed, but in half an hour Mr. Jones was suddenly summoned, and only arrived to see her draw her last breath. The Marshall Hall method was immediately employed for half an hour, without the slightest signs of recovery, *but a large quantity of frothy fluid* came from the mouth. At the post-mortem examination next day, it was reported that "both lungs contained an immense quantity of frothy fluid, the bronchi were filled with fluid and injected." In this case the lungs were loaded with and paralysed by water. There cannot be a doubt that the Marshall Hall method would have unloaded the lungs, but I cannot doubt, also, that had she been placed on one side on her arrival at the hospital the upper lung would have cleared and acted quite sufficiently to sustain life. A lung containing frothy fluid does not clear immediately; the bells of foam must become gradually condensed and ooze slowly away, and to assist this nothing is more adapted than the Marshall Hall method.

Dr. Trollope of St. Leonards-on-Sea was called to a man who had been taken out of the sea. The man could speak a little, and vomited a quantity of water; but he rapidly became worse, insensibility came on, the breathing was slow and faint, and the pulse flickering.

The Silvester method was being used, and Dr. Trollope persisted in it for some few minutes. "Meanwhile," Dr. Trollope reports, "his respiration had ceased, beyond a slight mucous rattle in the windpipe; his heart's action could not be felt; jaw clenched, and lips livid. ..... I then, finding these alarming symptoms supervening in spite of the persistence in Dr. Silvester's method, immediately had recourse to Dr. Marshall Hall's prone and postural, or 'ready,' method, and was gratified to find fluid escape from the mouth each time the body was laid on the chest, and respiration gradually set up, commencing with long-drawn respirations, or rather gaspings, at intervals. I persevered in the prone and postural movements for three-quarters of an hour, till respiration was thoroughly and satisfactorily established. The man then again vomited between a pint and a quart of water, and was afterwards able to swallow a few tablespoonfuls of tea, and went on satisfactorily."

In March, 1862, I was called to a man who had been knocked into the sea by a heavy chain. It was calculated that he had been under water three minutes. On getting him ashore he was believed to be dead, but one of the men thought "they ought to get the water out of him," and so proceeded to roll him from side to side, and whilst this was done, a quantity of water was expelled from the mouth, and they perceived some attempt at breathing.

A few minutes after this I was on the spot, and found the man apparently dying, making occasional and feeble attempts to breathe, with a very feeble and irregular pulse. He was lying on his side with his head upon a coat, and a quantity of froth tinged with blood lying on the coat in the neighbourhood of his mouth. I observed that clear water and froth welled out of his mouth at the end of every inspiration. Active friction of the limbs, hot bottles and bricks, were carefully applied, and ammonia to the nostrils. Nearly an hour elapsed before we thought it possible he could live. He then began to moan, and in a short time a small quantity of brandy was swallowed.

In July, 1864, a man was capsized in a boat at sea. After being in the water some time he was picked up and rowed ashore. On arrival he was cold and livid, but breathing with great labour. He was immediately turned on his side by the coastguardsmen, and a quantity of frothy fluid came from the mouth. He was taken to an inn, where he was kept on his side, and where I saw him a quarter of an hour afterwards. He was then breathing with difficulty. A fine white froth, almost like milk, was oozing from his mouth and nose; his face was very livid, and meaningless in expression; his breath was cold; the limbs and body generally were almost stone cold; the pulse could not be felt. There were a few moist râles in the left side of the chest, the side which was uppermost, but the breathing was tolerably free; the breathing on the side upon which he lay was very feeble and obscure, and moist râles more abundant. He could not be roused. In half an hour he became a little restless, and then vomited a quantity of water. The pulse could now be felt, but not counted; this gradually improved. Attempts at vomiting supervened, and occasionally a partial restoration to consciousness. After another attack of vomiting, the pupils, which had been widely dilated, became contracted, and he went off into a sound sleep. He passed a most trying night from restlessness, and pain at the epigastrium; and the next day he was still livid, but better and easier. The following day pleuro-pneumonia of the right side (that which was downwards) supervened. From this he slowly recovered.

There are many interesting details connected with these cases of drowning which for brevity's sake I omit; but the cases, I hope, illustrate sufficiently that in drowning there is *some* fluid in the chest, and that all methods of resuscitation which do not provide for the removal of this fluid are utterly valueless. For my own part, my increasing experience only tends to prove that there is as yet no known method equal to that of the Marshall Hall method.

Independently of its effect upon stertor, "position" has a direct influence in many conditions *allied* to the apoplectic, such as chloroform poisoning, drunkenness, &c. &c.; and I have observed that in cases of great exhaustion the change from the back to the side is accompanied by immediate and great relief; the breathing, from having been carried on with evident effort, has become at once peaceful and easy.

During sleep, when the vital powers are resting, it is not the *back*, but the *side* which is selected as Nature's position; and I believe the explanation to be that on the back the diaphragm has to lift the liver and abdominal organs with each respiration, whereas on the side—especially the right side—the liver lies practically on the bed, and the diaphragm can do its work without oppression.

The general conclusions which may, I think, be fairly deduced from the present communication are:

1. That a "laryngeal stertor" may be added to the three forms I formerly defined.

2. That the three forms of stertor which have a most important connexion with the apoplectic state are the palatine, pharyngeal, and mucous stertor.

3. That these three varieties, whatever their remote cause, are the immediate result of a local mechanical condition—a condition which may always, and at once, be changed, to the great relief of the patients, and sometimes to their permanent recovery.

4. That it is necessary to keep the patient on one side, and that the paralysed side should be downwards.

5. That mucus and other fluids gravitate into, and fill up, the lower lung; and therefore that if the sides be reversed the mucus will find its way into the opposite lung.

6. That the fluid, crossing from the large bronchi of one lung to those of the opposite, becomes churned into foam, and causes dangerous obstruction to the respiration.

7. That the lung is not injured by remaining inactive and filled with mucus for a long period.

8. That these principles apply to all conditions in which mucus or fluid exists in the lungs, and also to all conditions allied to the apoplectic, whether there be mucus or not.

Folkestone.

THE ETIOLOGY OF CANCER: STATISTICS AND REMARKS.

BY HERBERT L. SNOW, M.D. LOND.,
SURGEON TO THE CANCER HOSPITAL.

IN our present state of helplessness as regards the therapeutic treatment of malignant disease, any information tending to throw light on the origin of that class of maladies may (as a step in some measure towards their prevention) be deemed not unworthy attention—the more especially as I think very undue weight attaches (in the public, and even in the professional, mind) to some causes; while others are unfairly depreciated. I therefore venture to submit some statistics, taken chiefly from the records of the Cancer Hospital during the past two years; with the deductions which these seem to me to warrant.

1. *Hereditary tendency.* — Of 146 cases of uterine cancer there was some history of malignant disease having occurred in at least one other member of the family in 12 instances, with 7 very doubtful ditto. Of these 12, 4 patients reported relatives dead of the same disease; 3 of breast cancer; 2 of cancer in side (whatever that may mean); while in 3 cases the site could not be ascertained. Of 205 cases of cancer of the breast, there was a more or less credible family history in 27 instances; 6 more are marked doubtful. Of those 27, in 11 cases the mother, sister, or aunt had died of the same complaint (in 4 the mother, in 1 the mother and grandmother); 2 were stated to have died of uterine cancer, 2 of hepatic ditto. One relative (father) had died of cancer of the lip; 1 (grandmother) of cancer of the mouth: these affections being so invariably due to local irritation, I have no hesitation in excluding the cases altogether from the calculation. Again, 1 patient stated that her father had died of cancer of the breast; considering the rarity of such cases I think her statement must be regarded with doubt. In 13 cases the statement was confidently made that relatives had died of cancer, but the site was unknown. Thus of these latter cases we can only (with some show of reason) regard 15 as occurring in families where the disease might be hereditary. Taking the whole number, we find that in *breast* cancer hereditary tendency occurs in 13·17 per cent.; but, with the above deductions, in only 7·31 per cent. While in *uterine* ditto the percentage amounts to 8·21. Now, I conceive the only inference we can possibly draw from the above is, that if hereditary tendency to cancer has any predisposing influence whatever in its causation, such influence is of the very slightest, and in practice had much better be ignored altogether, as tending to mislead rather than to assist. Not long since I saw an unmistakably adenoid tumour removed from the breast of a woman, three members of whose family were stated to have died of cancer. I much doubt whether the small percentage recorded above would not be equalled by taking as many hospital patients at random, and inquiring as to the occurrence of cancer in their families.

2. *Injury.*—Of 143 cases of breast cancer, in which special inquiry was made as to preceding injury, 32 patients returned an answer in the affirmative, or 22·37 per cent.; while 12 gave doubtful replies. Among the uterine cases the idea of injury from external violence is necessarily almost excluded, yet 4 attributed their disease to falls or kicks, while many dated it from a confinement or miscarriage. Among the 205 breast cases quoted above 3 occurred in males, and in these it is noteworthy that 2 attributed their disease, with every appearance of probability, to blows, while the third gave an obscure history of injury. There can be no doubt that mechanical injury is a real exciting cause of malignant disease; but (except in epithelioma) the frequency with which the latter so arises is greatly exaggerated, both in medical text-books and in the public estimation. I must here point out one source of fallacy; women very frequently present themselves, within a week or two after some injury, complaining of severe pain in the breast, and in a state of the greatest alarm;—and only recover their equanimity after a lapse of many months, coupled with repeated assurances of immunity from cancer. By these cases I am led strongly to consider that in many instances the blow originates the cancer, not *directly* but *indirectly*, by producing mental depression, and by concentrating the attention on the part affected.

3. *Nervous depression (especially mental trouble).*—Of 103 uterine cases in which preceding causes of mental or physical nervous depression (trouble or very hard work) were sought for, 55 gave a history of preceding mental trouble (often combined with hard work), 10 of hard work alone, while 10 gave doubtful replies. Of 38 breast cases 24 patients gave a history of sorrow and anxiety, 4 of hard work, while 1 case was doubtful. Thus of the breast cases (although I must confess the number specially investigated in this connexion is smaller than I could wish), 73 68 per cent. gave an account of nervous depression, either mental or physical, immediately preceding the appearance of the disease, while in the uterine cases the percentage amounts to 63·1. From this I cannot help inferring that sorrow, anxiety, and hard work are very powerful factors in the production of malignant disease. The following case, in its exclusion of every possible cause of cancer save one, I regard as so typical that I cannot forbear relating it here; it is not included in the above 38. A lady aged forty, wife of a gentleman in comfortable circumstances, strong and previously healthy, leading an easy life, with no family, having a cheerful disposition, without family history of cancer, and never having sustained any injury, became greatly affected at the death of her brother after a short illness, and allowed this to prey on her spirits for some time afterwards. Within a few weeks a small lump appeared in her left breast; she paid no attention to it till six months afterwards, when, on examination, there was found a well-marked scirrhous tumour, with enlarged axillary glands.

I have above confined my remarks to malignant disease when affecting the breast and uterus, both as affording the largest number of cases for comparison and as practically the most important. I may add that, of 7 cases of rectal cancer, 1 gave a doubtful history of hereditary taint; 24 of cancer of lips; tongue, face, or mouth, give 4 instances, and 2 more very doubtful; 21 ditto of vulva, vagina, and other parts, give 2 instances. Epithelioma, wherever it occurs, is almost invariably (if not always) due to continued mechanical irritation. Nearly all the cases in which the lip, tongue, or mouth were affected could be traced to the irritation caused by a projecting tooth, or by a pipe-stem; and where these factors were absent the disease often originated at or near the angle of the mouth, where any little fissure would naturally be kept open by the motion of the parts. Two patients with epithelioma of the lip dated their malady from a piece of flesh being torn out during the extraction of a tooth; one, with epithelioma of the vulva, from a fall on the edge of a piece of board. So-called "ichthyosis" of the tongue, of course, is very apt to end in epithelioma. In 12 out of the 205 breast cases, both breasts became implicated. One case only was supposed to have followed "eczema" of the nipple.

Although I have not yet been able to procure a sufficiently large number of cases for comparison, I submit there is a strong probability that what is here affirmed of mammary and uterine cancer is also true of malignant disease (excepting, of course, epithelioma) wherever that may be situated. And I now beg to recapitulate the principal conclusions to which, I conceive, the foregoing statistics point:—

1. Hereditary tendency, as a predisposing cause of cancer (at all events, of mammary and uterine cancer), is almost valueless, if not entirely so; and in practical diagnosis should be altogether ignored, as misleading.

2. Mechanical injuries directly produce cancer in a certain percentage of cases; but this percentage is small.

3. As direct and immediate causes of cancer (especially, in my own experience, of uterine cancer), mental trouble and hard work are very potent agents; and exert more influence than any other antecedent within our present knowledge.

Bayswater, W.

THE CURE AND CARE OF THE INSANE.

By ROBERT BOYD, M.D., F.R.C.P.,
LATE SUPERINTENDENT OF THE COUNTY SOMERSET ASYLUM.

(Concluded from p. 955.)

THERE is abundant proof in the annual asylum reports of the visitors and superintendents throughout the kingdom that the Pauper Lunacy Acts hold out a premium, as it were, to the manufacture of lunatics, by enabling the parochial authorities to get rid of their troublesome, helpless, infirm and aged paupers, and thus crowding asylums with improper objects, instead of providing for them in the unions.

As the sick ward of the union is the basis of all care for the sick poor, and insanity is so frequently the result of bodily ailments, the laws regarding medical relief and pauper lunacy should be amalgamated. The county asylums have gradually become union infirmaries by the withdrawal of epileptics, idiots, paralytics, and infirm and aged persons; while by placing the workhouse infirmaries under the control of the visiting justices and commissioners in lunacy, the expense of further additions to asylums would be saved to the ratepayers, and a beneficial classification of the patients could be obtained. Within a distance of four miles from the Somerset Asylum was a workhouse not many years built for 440 inmates and containing eighty persons only, though the asylum was over-crowded and more room required.

In my annual reports the connexion between mental disorder and bodily disease is frequently reverted to. In an analysis of the causes of the first two thousand cases of insanity in the 17th Annual Report, page 28, it is shown that about one-half depended upon bodily or physical causes. Would it not be more rational to treat diseases with more care at the earliest stage, before delirium supervened, before the sufferers were beyond relief, or incapable of appreciating the efforts to restore them to health? Are they less objects for care and sympathy when suffering from sickness or accident, before being deprived of reason than afterwards? And would not measures taken at the outset have prevented much suffering, been more useful, and, perhaps, saved valuable lives from becoming mentally total wrecks? A poor man in writing to express his gratitude, concludes with this trite and significant observation, "poor people does be lost for want of means when they are sick."

Under the Poor Law the system is how to avoid relief to the poor in sickness, for the relieving officer is told that medical relief being the stepping-stone to other relief should, if possible, be avoided. Is it, then, to be wondered at that, under such a system, workhouses are comparatively empty, whilst asylums, which have been constantly added to, are still overcrowded, and insanity supposed to be increasing? This is becoming a national disgrace. The health of the poor is of the highest importance to the State, as it is from their ranks that our labourers, soldiers, and sailors are supplied. The great evil to contend against amongst the labouring classes is intemperance; it too often brings whole families to the workhouse, and about 15 per cent. to the asylum.

In visiting the Salpêtrière in Paris it reminded me of the Marylebone workhouse, but was on a much larger scale, containing between five and six thousand female poor, including the infirm sick and insane, who are all treated as the circumstances of their cases demand. The Bicêtre, a smaller but similar institution for the male poor, is situated in a different part of Paris. M. Fabret, physician to this large hospital of Salpêtrière, states in his book, that after several years' research into the morbid anatomy of insanity, and after failing to elucidate the nature of the malady by the aid of facts so gained, he next attempted to interpret the nature of mental disorders by recourse to the doctrines of psychology, especially those of Scottish metaphysicians, for fifteen years, but at the end of that time had to lament that his labour was all vanity and vexation of spirit. My own experience of upwards of thirty years, and after having made post-mortem examinations of nearly every case that died in the Somerset Asylum from 1848 to 1868, and previously of more than 2000 in the St. Marylebone Infirmary (the results of which have been published in the Philosophical Transactions for 1861, and Willis's translation of Wagner's Physiology, p. 669), agrees with that of M. Fabret as regards the morbid anatomy of insanity. It was found that the average weight of the brain was greater in the insane than in the sane, that the weight differed in various forms of insanity, that the left cerebral hemisphere was usually heavier than the right, especially in epileptics, and that the spinal cord was usually diseased in cases of general paralysis, the most fatal form of insanity in males. The difference in weight between the whole brains of the sexes had been previously observed, and the age at which it arrives at its maximum weight.

Workhouse infirmaries might be made most useful auxiliaries to hospitals for extending the means of clinical instruction to pupils at the bedside, which has become so essential to candidates for final examination in their knowledge of medical diagnosis and treatment; provided always that those infirmaries were no longer under the control of persons annually elected, but under visitors with power to carry out a liberal provision of food and medicine for the sick poor generally.

Dr. Babington has observed "that the mind and the body reciprocally and mysteriously affect each other, and in some maladies are so intimately connected with the disordered state of both that it is often difficult to determine on which they more essentially depend, or which they more seriously influence."

By some of the most eminent writers on insanity, as Pinel and Esquirol, the causes are considered primarily to depend on derangement of the digestive functions, and frequently to be connected with tubercular disease of the lungs. In other words, that insanity is the delirium of chronic bodily disease. If so, it would appear an argument in favour of placing the sane and insane on an equal footing as regards nursing and medical comforts, as in France, where there are no poor-laws, and the rule is insisted on in the distribution of relief, "that misfortune does not obliterate shame or destroy self-respect, and that one of the most important duties is to succour the unfortunate without causing them a blush."

The neglect of the sick poor, aged, and infirm in workhouses was frequently alluded to in the annual reports of the Somerset Asylum, and the necessity of placing them under the same kind of treatment as the insane poor insisted on.

With respect to private patients, numerous applications were made by persons for the reception of friends unable to pay the charges of private asylums. By the late Lunacy Act facilities are given for receiving this class of patients into county asylums. The intercourse of private with pauper lunatics is not desirable; the private patient becomes discontented, and renders the others so. During the acute stage of mania no inconvenience would be experienced by associating the two classes of patients. Regarding county lunatic asylums as hospitals for the treatment of insanity in the *acute stage*, how far might they be made available for patients of both classes, provided that, after the acute stage, the patients could be removed to asylums suited to their relative conditions of life?

It has been suggested that it would justify proceedings and afford time for the friends to make their arrangements, without injury to the patients, if all cases, not found lunatic by inquisition, were sent at once for curative treatment to the county asylum. Slight alterations in county asylums might be sufficient for such a purpose.

It has been my endeavour here to show, in the first place, that the Pauper Lunacy Acts might advantageously be abolished in favour of Medical Relief Acts, to include all cases of the poor, whether visited by sickness or insanity, without the stigma of pauperism being attached.

2ndly. That the workhouse infirmaries should, like asylums, be placed under the control of visiting justices and the commissioners in lunacy.

3rdly. That the Workhouse Infirmaries should be made available for the instruction of medical pupils and general practitioners.

Finally, and above all, it cannot be too urgently insisted on that the action of the Legislature is much needed to provide measures for the admission to and retention in lunatic asylums of none but proper cases; and that due means should be adopted for the safe keeping of harmless and incurable cases, apart from those which may admit of cure. When this desirable object has been attained, no doubt the number of recoveries will be largely increased, and by this advance in humanity the expenses diminished.

These remarks are not intended to apply to the metropolitan district, in which, under the Local Government Board, the chronic cases of insanity and the idiots have been provided for.

Bolton-row, Mayfair.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tam aliorum tam proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

WANDSWORTH INFIRMARY.

CASE OF PURPURA HÆMORRHAGICA; DEATH; NECROPSY.

FOR the following notes we are indebted to Mr. James Allan, assistant medical officer.

Catherine W——, aged twenty-one, was admitted on September 15th. She had been married for three years, and had suckled her only child fourteen months, up to onset of illness. The menstrual function had not been re-established since delivery. During her married life she had worked hard as a laundress, and was so occupied until lately. Her meals had been taken irregularly, and the food was of poor quality and not always sufficient. Once, at the age of twelve, she had blood-spitting, and she had a brother "delicate in the chest."

Three weeks before admission pain was experienced in the left knee-joint, which caused her to limp. She continued at work till September 2nd, when she had pain in the left hip. She lay in bed with the knee flexed, and had a rigor. She suffered from sleeplessness, loss of appetite, and great thirst; did not perspire, but became thin. The bowels were confined.

On the 14th she spat up a large quantity of blood; the bleeding recurred next day, prior to her being taken to the infirmary. Before the hæmoptysis there had not been cough or any other chest symptom.

When examined after admission the patient was very pale, and rather thin; the hair and complexion were dark. There seemed to be acute pain in the left hip, knee, and limb generally. An expression of pain was elicited by pressure over the sacrum and lower lumbar region, along the left sacro-iliac joint, in the left groin, and on tapping the left iliac crest. The left knee was not tender or swollen, and was of the same temperature as the right. The skin was dry and harsh, and presented numerous small ecchymoses all over the body and limbs. Examination of the chest detected nothing abnormal, except over a limited area at the base of the left lung posteriorly, where there was crepitation with inspiration. Temperature in axilla 101·5°; pulse 100. Pain and excitement were quieted by the administration of opium.

On Sept. 17th she had copious hæmoptysis, the blood coughed up consisted partly of clots. After free use of ergot internally the hæmorrhage stopped, but not readily; spray from a solution of sulphate of iron was inhaled; the patient also took small pieces of ice into her mouth. Temperature in the evening 100°. A little brandy was ordered on account of faintness.

On Sept. 22nd several dark, bruise-like patches, of considerable size, were visible on the back in the lower lumbar and sacral regions. The seat of a similar patch on the left forearm was acutely painful for about twenty-four hours before discoloration took place. The small spots on the body were getting larger and purple. There was no expectoration. An aortic systolic bruit was detected. The patient was delirious during the night; the skin was dry, tongue pale, dry, rough, not coated; and there were sordes on teeth. Morning temperature 102·2°; pulse 120. Evening temperature 101·6°. Ordered quinine and digitalis; diet as before. She was restless, but not in pain; thirst was great.

On Sept. 24th she had subsultus tendinum. Morning temperature 101·2°; pulse 120. Evening temperature 101·2°; pulse 120.

She died at 3 A.M. on the 25th. Hæmorrhage had not recurred since the 17th; food taken readily throughout.

Necropsy twelve hours after death.—On the cutaneous surface there were numerous purplish maculæ, fewer on the posterior aspect of body and limbs than anteriorly, none on the face. The spots were round, and from one line to one and a half lines in diameter. Section showed these to be due to extravasation of blood in the skin. Several dark patches of considerable size, irregular in outline, resembling recent bruises, were situated on the lower part of the back, one on the right thigh near the groin, and one on the posterior surface of the left forearm, near the wrist; these depended on subcutaneous extravasations. There was not much subcutaneous fat; the manubrium sterni was cut through transversely without difficulty by a strong knife. The pericardial sac contained half an ounce of yellowish serum. There were numerous extravasations on the heart's surface beneath the visceral pericardium—small, rounded, varying in size from mere points to spots a line in diameter. The right heart contained a large firm adherent yellowish-white clot, as well as some dark blood, very thin; the left heart was nearly empty, and had small white clots entangled amongst the chordæ tendineæ. The aortic arch was occupied by a thick, tenacious white clot. Under the endocardium of both ventricles there were minute extravasations, more numerous in the left. The aortic valve was slightly incompetent, the flaps were somewhat rigid, and there was atheromatous change around the commencement of coronary arteries. The heart, the left ventricle of which was hypertrophied, weighed 10 ounces. The right lung weighed 22 ounces, and was anæmic and highly œdematous throughout, but more markedly along the posterior border. There were several old, very limited pleuritic adhesions; no fluid in the right chest, nor subpleural extravasations. The left lung weighed 20½ ounces, and was œdematous, but there were no adhesions. At the base of the lower lobe, posteriorly and involving a limited area, a portion of lung, pyramidal in shape, besides being œdematous had a blood-stained appearance externally and on section; the lung tissue was not broken down, the bronchi of this part were full of dark clotted blood. There was about an ounce of reddish serum in the left pleural cavity. The intestines were remarkably pale, blanched, and distended with flatus. The stomach was also distended, and a small patch of its mucous membrane near the cardiac orifice had undergone post-mortem digestion to a slight extent. The intestine presented no lesion; contents were thin, yellowish. The mesenteric glands were larger than normal. The spleen was large, weighed 12½ ounces, was firm, and purplish on section. The liver weighed 57½ ounces, bile-stained; under the capsule, over a considerable extent of right lobe on its upper surface, there was blood extravasated, and here the capsule stripped off very readily; section at this part showed that the liver tissue was infiltrated with blood to the depth of half an inch. The gall-bladder was empty. The right kidney weighed 5½ ounces, the left 6½ ounces, the capsules were adherent, but there were no hæmorrhages; section under the microscope presented increase of intertubular tissue. The right suprarenal capsule weighed 63 grains, the left suprarenal 66 grains; the pancreas 4¼ ounces. The bladder was pale and blanched, and there was a small number of minute submucous hæmorrhages. The uterus was small; length 2⅞ inches; weight, without appendages, 1¾ ounces. There were numerous hæmorrhagic stigmata under the mucosa of body of uterus. Both ovaries were enlarged, right was 267 grains in weight, left 284 grains; both were freely movable; under the microscope they had the characters of a fibroma with several small cysts. The left hip-joint examined and found normal, also left sacro-iliac joint. The pelvic fascia posteriorly was thick and readily separable from the sacrum; between this fascia and the sacrum and ligamentous structure behind it there were numerous small hæmorrhages. The coccyx, sacrum, and contiguous part of left ilium had an unusually dark appearance on the surface; these bones were blood-stained on section, as were also the bodies of lower lumbar vertebræ. There was a hæmorrhage in the sheath of the left great sciatic nerve near its origin. Examination of the head was not permitted.

HOSPITAL SUNDAY AND SATURDAY IN THE PROVINCES.—At Gloucester the total proceeds of these collections amounted this year to £492 2*s.*, being £110 less than in 1879. Some of the Church collections, however, have been deferred. The sum, less expenses, is thus divided: Infirmary, £257 1*s.* 6*d.*; Dispensary, £73 2*s.* 7*d.*; Children's Hospital, £72 15*s.*; Eye Institution, £73 12*s.* 7*d.*—At Hull the sum collected was £657 8*s.* 8*d.* (against £679 17*s.* 5*d.* in the previous year); distributed as follows: The Infirmary, £455; the Dispensary, £80; Children's Hospital, £55; Homœopathic Dispensary, £20.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE last ordinary meeting of the Pathological Society for the year was held on Tuesday, the 21st inst.; J. Hutchinson, Esq., the President, in the chair. Dr. Drewitt exhibited a living example of lato rickets, which some of the members of the Society considered to differ in many points from the more usual form of the disease. The debate on rickets was then reopened by a very suggestive speech from the President, and continued by Mr. Lucas; Dr. Baxter, who made a valuable addition to the facts of the etiology of rickets; Dr. Barlow, who spoke of the disease misnamed fœtal rickets; Mr. Shattock, and others. The meeting was prolonged beyond the usual hour, and it was late when Dr. Fagge, in a few sentences, closed the debate. Dr. Lees and Mr. Pearce Gould were appointed auditors of the treasurer's accounts, to be presented at the ensuing general meeting of the Society.

Dr. DREWITT showed a boy ten years and eleven months old, a patient under Dr. Cheadle's care at the Hospital for Sick Children; one of six healthy children, none of whom suffered from rickets. Up to eight years of age he was well, and played about like others of his age; but a month later he complained of aching pains in his legs, and he had to be carried to and from school, and all his bones began to bend. On admission to the hospital he was worse than at the present time; his femora, tibiæ, clavicles, and ribs were especially bent. There was great tenderness of the subcutaneous borders of the tibia and ulna, enlargement of the ends of the bones, and troublesome cough. Under good diet and cod-liver oil he rapidly got worse, but when taking eight grains of iodide of potassium three times a day he quickly improved, the tenderness of the bones disappeared, and his cough left him.—The PRESIDENT asked if the cod-liver oil was discontinued when the iodide of potassium was given, and whether it was the brown or the pale oil that was used. It was a remarkable case, and especially interesting in that anti-syphilitic remedies had done good when cod-liver oil had failed.—Mr. GAY asked for particulars of the family history of the lad.—Dr. DREWITT replied that there was no history of syphilis in the mother, who was healthy. Some of the children had had infantile thrush. The cod-liver oil was discontinued while the iodide was given.—Mr. ADAMS remarked that the case differed from ordinary rickets; the femora were very shortened and greatly bent, but the tibiæ were hardly bent at all; the forearms were bent as if from crawling. He thought it a transitional form between rickets, mollities ossium, and osteitis deformans.—The PRESIDENT requested Dr. Fagge, Mr. W. Haward, and Dr. Drewitt to report upon the true nature of the case.

The debate on Rickets was then resumed.

The PRESIDENT.—First, I have to express a shade of regret that the debate, interesting and instructive as it has been, has not produced more in the form of pathological evidence. It may be that this evening will somewhat confute this criticism, otherwise I think we have all of us noted that in the main it has consisted in the interchange of opinion rather than the citation of new facts. I may be asked, perhaps, what kind of facts I should have liked. Well, in reply, I should have liked definite information as to the state of the urine in rickets, and possibly the state of the blood also. Further and more extended chemical analyses of the bones at different stages of the complaint also seem desirable. Additional facts as to rickets in the lower animals, with specimens, are wanted. So also with rickets in the fœtus and congenital rickets. Lastly, I should much have liked to know from careful observation whether the state of the teeth, carefully distinguishing between the first and second sets, is, or is not, modified by rickets. Amongst the parts of the subject most fully entertained in this discussion has been the relationship which exists between inherited taint of syphilis and rickets. Dr. Fagge in his opening address asked "whether syphilis may not be one of the causes of rickets," and Drs. Barlow and Lees have presented us an excellent report, which supports to some extent the contention of M. Parrot that the cranio-tabes formerly supposed to be due to rickets—and with it some other lesions—is really due to syphilis. It is now long since we have known well that many of the malformed foreheads, most of the malformed teeth, and many cases of bent and enlarged bones, formerly considered to be of a rickety nature, are really syphilitic. The explanation of the precise cause of the deformity in the syphilitic skull has, however, been reserved for M. Parrot and Dr. Taylor, and to them we owe our present knowledge that in infancy the osseous system is often very extensively affected by a transitory form of inflammation. The skull bones and the long bones alike suffer, and the epiphysial ends are especially prone to be severely attacked. There remains, therefore, I think, no doubt whatever that in congenital syphilis a state of general periostitis is very common, which may easily be thought to resemble rickets. The child is in pain all over, and the joint ends of the bones are swollen and tender. In this condition the flat bones become vascular and soft, and it is difficult to withstand the evidence in favour of the belief that not only may they thicken, but that, under special local influences, they may atrophy and suffer local absorption. The influences which localise the thinning may be either external or internal, pressure of the brain or pressure of the pillow. If we regard the symptom named "cranio-tabes" as simply local absorption of soft bones from pressure, may we not easily admit that it is probably common both to syphilis and rickets? Each of these diseases in its own fashion makes the skull bones vascular and soft, both make it painful for the child to move, and thus favour the occasion of injurious pressure. We need not, I think, go so far as to believe that syphilis is "a cause of rickets," but may rather prefer to say that syphilis may on its own account produce conditions which simulate those of rickets? Is it not probable that to the skilled and careful observer there will in most cases be found grounds for a differential diagnosis between rickets and syphilis, and that too both in the ward and the post-mortem room? That the two often co-exist and run their course together, is highly probable; but that they are essentially and totally distinct, being induced by wholly different causes, will, I think, be the verdict of all who have listened to this discussion. Surely those who confuse them, or who think that rickets apart from syphilis has no existence, commit a grave clinical error. I was glad to hear Sir William Jenner's defence of the term diathesis as applicable to the state of health which induces rickets, and his refusal to allow that word to be restricted by any arbitrary definition. If we are to understand by diathesis a condition of defective health, giving during a long period proclivity to special forms of disease, then undoubtedly the rickety state is a diathesis. If, on the other hand, the term is to be restricted to the results of a specific poison, then it is not. But the latter is not a very successful employment of the word. Just in the same sense as we have a scorbutic diathesis, a tubercular diathesis, a gouty diathesis, and a leprous diathesis, so we have a rachitic one. It is merely a question as to the use of the word, and those who object to it in this sense will perhaps kindly supply us with a better. Not only, however, do I contend that the rachitic state is correctly included with the diatheses, but I wish to ask Dr. Fagge very definitely whether there are any good reasons why it should not be placed with confidence in one class of diatheses. I allude to that class which may perhaps be conveniently known as "diet-diatheses," or assimilation diatheses. In this class are to be grouped, with others, scurvy, gout, pellagra, and in my opinion leprosy, all due to some error in diet or assimilation. It is very important to bear in mind respecting all of them, that although usually the cause is defect or excess of some food element, yet that precisely similar results may ensue from defective assimilation or excretory functions. The effects of food, both negative and positive, are always relative to digestive capacity; it may be due to the idiosyncrasy of the individual, and thus the somewhat vulgar saw as to meat to one and poison to another becomes a very literal truth. I would not insist upon this most obvious fact were it not that I think that a forgetfulness of it has done much to put us into a mist as regards the real causes of rickets and the maladies associated with it. Because defective food supply cannot in all cases be proved, it is hastily assumed that rickets is not a diet disease; and those who think it hereditary, consider that its hereditariness points to the same conclusion. Dr. Fagge quoted a German

authority (Vogel) as insisting on its hereditariness, and saying not a word about food as a possible cause. But is not gout hereditary? and is not gout distinctly a diet disease? I would quote leprosy as an equally strong instance, but that the facts respecting it are not so well admitted or so widely known. There is nothing inconsistent in the fact that a tendency to disease produced by diet should be hereditary. It is the organs of assimilation which are inherited. Through their peculiarity the effects of unsuitable food may be greatly exaggerated, or even the most wholesome may prove non-nutritious or injurious. The arguments which have been thought to invalidate the hypothesis of a diet cause for rickets have been held to have yet heavier weight in the case of osteo-malachia, or mollities ossium. It occurs to those who have full choice of their food, and under conditions in which it is impossible to suspect any ordinary deviation from sound rules of diet. Yet may it not be, after all, that it is an instance of defect in assimilation? I wish especially to elicit Dr. Fagge's opinion on this subject. Mollities ossium is on the Continent known as "rickets of the adult," and Trousseau in particular devotes an able lecture to the attempt to prove their identity. Yet I think we may note amongst ourselves a decided willingness to avoid this subject, and to admit that nothing whatever is known as to the real nature and relationships of mollities ossium. In the present discussion it has, I think, scarcely been mentioned. Dr. Gee told us that if a child is not rickety at a year old, it may be assumed that it will not become so. Other speakers, and amongst them definitely and emphatically Sir Wm. Jenner, have extended the period of liability; but none, so far as I have heard, have hinted that it is a liability which extends through life, and is probably almost the same in kind, though modified in its results by age, and other circumstances. Amongst the arguments which Trousseau mentions in support of the identity of rickets and osteo-malachia is the fact that they are curable by the same remedy. He is a firm believer in cod-liver oil as the best means of curing rickets, and he records a most remarkable case of advanced mollities ossium in which the patient was most definitely cured by its use. Surely we have, in such facts, not only support for the belief in their identity, but also in the theory of their being both due to defective assimilative power. Let me, in parenthesis, say that Trousseau insists that the oil must be the brown, unpurified kind. It is just possible that in the general substitution of the purified kind in English practice is one explanation of our diminished faith in the oil as a specific for rickets. If we assert that rickets is essentially a food diathesis we by no means exclude from the list of its causes such influences as cold, deficient clothing, bad ventilation, and the like. Nothing is more certain than that one and all of these may help to disorder the organs of assimilation, and prevent the perfection of digestion. Alone, however, none of them would, excepting in the hereditarily predisposed, be efficient in the production of rickets; whilst alone and quite unaided by them, defective food has been over and over again proved to be competent to that result. Defective food is then probably the main cause; defective assimilation in many cases helps the influence of defective food, and in a few cases accomplishes the whole task; the others are to be reckoned only as constituting and as helping chiefly to induce defective assimilation. If Dr. Fagge is not inclined to attempt the repetition of the diet hypothesis as the cause both of rickets in the infant and osteo-malachia in the adult, I have next to ask him whether it might not be convenient to somewhat modify our nomenclature, and place the series of related maladies in suitable juxtaposition of alliances. It is probable that peculiarities in the mode of life at different periods of life are the chief influences which modify the malady. We have perhaps the following: intra-uterine osteo-malachia, or congenital rickets; infantile osteo-malachia, or rickets of young children; osteo-malachia of adults; osteo-malachia of pregnancy; osteo-malachia of insanity; osteo-malachia of senility. It would be of much interest to say a few words in explanation of the different modes of manifestation assumed by the same malady at different periods of life, but time does not permit. I may just hint, however, that it is easy to explain both why osteo-malachia should be peculiar when it occurs to infants, and why it should be found in practice so overwhelmingly common in them in proportion to other ages. It is during the first year of life that absolutely no choice as to food is permitted, and that a sameness of dietary is attained which finds no parallel at any other. If the milk given to the infant be defective there is no chance of escape, for it is probably the one sole article of food. The peculiarities of osteo-malachia of the infant are due to the fact that the bones are then still growing, and the cartilages unossified. At later periods no disease of epiphysial cartilages is possible, since, for the most part, these have ceased to exist. Dr. Fagge has drawn attention to the frequency with which symptoms of nervous disturbances occur in rickets, and has referred not only to the well-known deviations from the average in point of intelligence, but to hydrocephalus, chronic cerebritis, convulsive affections, tetany, &c. It is of not a little interest to those who believe in some bond of connexion between the two conditions to note that in adult life with certain forms of insanity osteo-malachia is constantly associated. In this instance, it has been conjectured that in some way the nervous system interferes with the nutrition of the bones. Is not the hypothesis far more likely that both the nerve centres and the bones share in a defect of assimilation, in existence probably for a long time, before any symptoms in either class of organs revealed it? It may help, probably, not a little to the full acceptance and computation of the diet theory of rickets if we emphasise an opinion expressed by both the opener of the debate and by Mr. Warrington Haward and others who have taken part in it. I allude to the belief that a large majority of cases pass unrecognised. So long as we think only of well characterised cases, so long are we likely to cherish a belief that the disease is, in some sort, a pathological entity, and due to some specific cause. If we break away from this notion and recognise what is probably really the fact—that we only diagnose exaggerated cases, and that a tendency to the same, or a slight degree of it, is present in thousands of patients to whom the term rachitis is never applied,—we become better able to realise that the malady, so far from being a specific disease, is not even a well specialised one. The same argument is applicable to the mollities ossium of adults. To put this idea in other words, it may be said that when a condition of defective assimilation in an infant rises to a certain point, and produces failure in the process of ossification, we name it rickets, and when a similar ailment in an adult rises to a certain height of severity and produces brittle bones we call it mollities ossium. For one infant who manifests the outward signs of rickets, and for one adult who shows those of mollities ossium, probably there are in each case a hundred in whom the tendency, in greater or less degree, and for longer or shorter time, is present. We recognise, name, and study only the severe and exaggerated examples. We must make a clear distinction between congenital rickets and hereditary rickets. The evidence which has been given that signs of rickety changes may be present in the mature fœtus at birth by no means proves that there was in these cases an inherited disposition to rickets. As has been well observed indeed by Dr. Joseph Adams, congenital conditions of disease not seldom are hereditary. The mother is to fœtus not only its progenitor, but its nurse during intra-uterine life. If rickets be a disease due to defective food and the mother's blood be in a defective condition, it may easily come about that, although the fœtus originally inherited nothing, yet it may become rickety during its pre-natal period of life. A disease which is in a true sense hereditary, ought to be derivable indifferently from either parent—sperm or germ; but it is clearly possible that rickets may not be so. We must admit, I think, the evidence that rickets is occasionally congenital, the rarity with which it is so fits well I would submit with the hypothesis of its food causation, since we know that even from very feeble mothers the fœtus often manages to obtain a supply quite sufficient for its full growth. It is very different when it comes to depend solely upon a single secretion, the milk of the same mother. As to the evidence of the transmission of hereditary tendency to rickets. I do not think that I have in this discussion heard any facts excepting the little fragment of evidence which I myself produced. In the case I refer to, Dr. Ormerod's, a father who had rickets in childhood and mollities ossium in adult life, had also two daughters who suffered severely from rickets. It is obvious that these children may have been themselves subjected to the ordinary food-causes of rickets, and that inheritance had nothing to do with it. I am unable to state anything as to their mother's health, or the management of their infancy. Still we may safely believe that there is nothing improbable in the idea of the hereditary transmission of a constitutional tendency to rickets—that is, to

speak definitely, of a tendency to defective function on the part of the organs of assimilation, which may, either with or without the help of contributory causes, at some time bring about such a defect in the composition of the blood as would interfere with the nutrition of the bones.

Mr. CLEMENT LUCAS.—I would not call rickets a diathetic but rather a dietetic disease; for though bad air, bad clothing, and general squalor and filth, together, perhaps, with certain constitutional states in the parents, may contribute to its production, there will, I think, be found in every case an insufficient or altogether injudicious diet. Has any gentleman present ever seen rickets without a distended abdomen? In my experience it is constant. The liver is rarely much enlarged; the spleen is very variable. I can show that enlarged spleen may be due to rickets without syphilis, and to syphilis without rickets, but the two spleens may be pathologically distinct. By far the chief cause, however, of the enlarged abdomen is the distension of the stomach and intestines with flatus, consequent on injudicious feeding. Children under nine months suffering from rickets will almost invariably be found to be bottle-fed, whereas children suffering from rickets at sixteen or eighteen months will often be found still hanging to the mother's nipple. In either case the diet is injudicious, and I will undertake to produce rickets in any child under three years of age that I may be allowed to feed improperly. As regards which child is most frequently attacked by rickets, my experience, in accord with what Sir W. Jenner said on the last occasion, was that the eldest child of the well-to-do and the later children of the poor which suffer most. The eldest child of the rich suffers because it is an experimental child, and the parents learn by practising upon it how best to feed those that follow. Dr. Fagge has shown, and I agree with him, that the younger children of the poor suffer because the parents are unable to provide sufficient food for them. He considered it could be and was hereditary in the sense of reproducing the rickety frame and a tendency to become rickety under the special favouring conditions. It was often asked why there was more frequent and greater enlargement of the epiphysis of the radius than the tibia. It is because rachitic children are four-legged animals, crawling about on hands and knees, that the wrists suffer and the ankles waste, but in children who walk upright I always find the ankles enlarged as well as the wrists; but here, again, rachitic children are continually falling, and then, as in a case in Colles' fracture, it is the lower end of the radius which receives the force of the concussion. For the same reason the beading of the ribs is a constant symptom, because the ribs are ever on the move. Another symptom to which I would allude is laryngismus stridulus. This is a local spasmodic affection found always associated with rickets. Must it not be due, then, to some local irritation of the recurrent laryngeal nerve? I think it not unlikely that the growing extremities of the tracheal rings will be found enlarged and pressing on the nerve, or possibly it may be irritated where it passes under the inferior cornu of the thyroid cartilage. If not here, the spot where it passes through the jugular foramen should be examined. It is so localised a spasm that it must be due to a local cause. No description that I have met with quite accords with my experience of the rachitic head. In the first place, it is a large head, and those who say that the head is not enlarged, but simply rendered disproportionate by a lack of development of the face, have fallen into error by including in the non-rachitic class heads which have been enlarged by antecedent rickets, the patients at the time of examination showing no enlarged epiphyses or other signs of rickets. There is a child now in the Evelina Hospital who has a remarkable head, but no enlarged epiphyses. I had some difficulty in persuading the house-surgeon and registrar that this was due to rickets till he stripped the chest and exposed a characteristic pigeon chest. There is also a boy in the hospital with most extensive rachitic deformities, on both of whose knees I have operated by Ogston's method. He is eight years of age, and has a head twenty-one and a half inches in circumference—more than an inch above the average. I got Mr. Hall White, the house-surgeon, to measure the heads of the children at present in the hospital. Of these seventeen show signs of rickets, and their average age being 4·72. Mr. White finds the average circumference of the heads to be 21·22. Comparing these with a similar number of non-rachitic children, Mr. White found, with an average age of 6·05, the average circumference was 19·95. The rachitic head is peculiar. It is a long head and a broad head, but flat at the top. It invariably gives increased width between the eyes, showing that the base is increased as well as the vertex. In its most extreme form, it is composed of four convexities, like four scallop-shells articulated together, corresponding to the frontal, parietal, and occipital bones. The fontanelles are depressed, and remain depressed when ossification is complete. The antero-posterior ridge between the parietal bones, which is common in skulls, is absent in the rachitic skull, and a depression above a very convex occipital bone in the adult is almost characteristic of old rachitis. Thackeray's skull was undoubtedly rachitic. I could allude to very many others, and the rachitic head is not a thing to be ashamed of; indeed, he regarded it as a great good fortune.

Dr. BAXTER.—It was with a view to obtain some more exact notions as to the causation of the disease that I investigated upwards of a hundred consecutive cases of rickets, with especial reference to the following points:—The age of the parents, their health (particularly as regards the presence, in either of them, of any exhausting disease—e.g., phthisis), and such evidence of their having themselves suffered from rickets in infancy as might be furnished by the existence of thoracic deformity. The number and health of previous children, if any, were recorded. The circumstances of the mother during her pregnancy were inquired into. Next the hygienic surroundings of the patient, especially as regards exposure to damp and seclusion from sunlight. Also the existence of other disease, antecedent or concomitant, more particularly inherited syphilis. Lastly, the nature and quantity of food administered since birth. The investigation in every case was conducted with some care. A good many of the records have unfortunately been lost, though the results of the inquiry remain. But I have succeeded in recovering those of the first eighty cases, which I have analysed afresh, in order to give numerical precision to my statements. Without going into needless details, I may briefly say that no constant relation was made out between any of the above reputed factors and the development of rickets, with one exception, diet. Take, for instance, the place of the patient in the family series, on which considerable stress was laid, many years ago, by Sir William Jenner. Among my cases of rickets 10 per cent. were first-born children, 13·5 per cent. were second-born children, 19 per cent. were third-born children, 13·5 per cent. were fifth-born children, 6 per cent. were sixth-born children, 10 per cent. were seventh-born children, 2 per cent. were ninth-born children and upwards. The larger proportion of the above cases can hardly be ascribed to the influence of repeated pregnancies in exhausting the mother's health, or reducing the standard of material comfort enjoyed by the parents. Again, as to inherited syphilis, only 13·5 per cent. of my cases are noted as unquestionably syphilitic, 12 per cent. more are marked doubtful. It is, perhaps, worthy of mention that of the 23 per cent. of the whole number in whom cranio-tabes was observed no less than 75 per cent. were syphilitic. This, of course, adds nothing to the weighty evidence adduced by Drs. Barlow and Lees; I allude to it in passing, because, at the time my observations were made, I had no suspicion of there being any relation between the two things. These instances are enough to illustrate the kind of negative results brought out by the inquiry. The only positive result, as I have remarked, concerned the diet of the infant. It was found that no less than 92 per cent. of the whole number had been given farinaceous food of one kind or another before the age of twelve months. Here are the figures: 42 per cent. had had farinaceous food daily from their birth, 30 per cent. had had farinaceous food daily from the age of three months, 4 per cent. had had farinaceous food daily from the age of six months, 10 per cent. had had farinaceous food daily from the age of nine months. It may be added that in many, though not by any means in all, the first onset of the disease, and its degree of severity appeared to be distinctly related to the period at which the administration of starchy matter was begun, and to the proportion between this element of the dietary and the others with which it was invariably associated. Of the 8 per cent. of cases in which no starchy food had been given before the age of one year[1] several might have been ascribed to materna-

[1] It must be remembered that the fact rests on the unsupported testimony of the mothers. My strong dislike to starch-feeding was well known among the out-patients of the Evelina Hospital, and their tendency would have been to conceal or to minimise it.

feebleness, the mothers suffering, at the time, from general arthritis deformans. One child was undoubtedly syphilitic, another was bred in a cellar, to which no daylight ever penetrated, and in which gas was continually burning. In one case only could no cause be made out. The first child of young and healthy parents, living amid excellent surroundings, free from syphilitic taint, nourished exclusively at the breast, began to show signs of rickets at the age of five months. The disease was mild, but unmistakable. So far, then, the result of the inquiry seemed to point decidedly in one direction. But clinical evidence of this sort, even when drawn from a very large number of cases, affords, at best, only a certain probability; sufficient, perhaps, as a provisional guide to action; but never amounting to proof. To obtain this, a series of experiments was undertaken with puppies, kittens, rabbits, guinea-pigs, and white mice. As soon as possible after their birth they were put upon a diet of pure arrow-root jelly, with a variable quantity of added milk. Their digestive juices were speedily found to be deficient in, or destitute of, amylolytic power: the starch-jelly passing through their intestines unchanged. Let me say at once that in the issue of these experiments I was disappointed. They were fairly numerous; but in no single instance were such changes produced in the osseous system as could be considered identical with those observed in the human subject. The administration of starchy food to these young animals was always followed by the usual phenomena of inanition; when the proportion of starch was great, they died quickly; when it was smaller, death was delayed for a longer period. But, quick or slow, the course of events was the same in all. The bones partook of the general atrophy; they were thinner and more frail than in healthy animals of the same age; but they never showed any specific changes at their junction with cartilage. I attributed my failure at the time, and I think justly, to the extreme difficulty I encountered in keeping the animals alive for any length of time. In no case did they live long enough to furnish me with evidence *against* the starch hypothesis, as they yielded none to confirm it. I believe, a French observer, M. Tripier, failed, like myself, to induce rickets artificially in the lower animals; with the details of his work I am unacquainted, as I have never succeeded in laying hands on a copy of his memoir. It was not without some feeling of surprise that I found myself baffled by an obstacle much more serious than I had been led to anticipate from the records of success achieved by earlier experimenters. Published statements had prepared me to find spontaneous rickets not uncommon among domestic mammals, and artificial rickets easy of production. Now I am bound to own that I have never been fortunate enough to see a case of true rickets in one of the lower animals, either during life or after death. I would not be understood to question the occurrence, or even the frequency, of the disease among them; but of this I am quite sure, that many instances of so-called rickets in the lower animals are instances of a disease of the skeleton by no means identical with human rickets; while with regard to many other cases that have been placed on record, the published evidence is sufficient to enable us either to affirm or deny their identity with the infantile disease. Experiment, then, did nothing to strengthen or to weaken the result of clinical observation. We may naturally ask, if the starch-hypothesis be admitted as probable, whether any possible connexion can be suggested between two sets of phenomena, superficially so disparate, as starch-feeding and rickets? In the first place, starch may be supposed to exert some directly noxious action by undergoing decomposition in the bowel, and yielding products capable of being absorbed into the blood, and exerting an influence on the development of the bones analogous to that exerted by phosphorus in Wagner's experiments. The objection to this is that, so far as we know, starch undergoes no such decomposition; we find it in the excreta, stained with bile, but otherwise unaltered. Secondly, it has been thought indirectly harmful, owing to its lack of nutrient properties. That the digestive organs of infants and young animals are incapable of converting starch into sugar has been proved both by physiological experiment and clinical observation. Were an infant fed on starch alone it would die of starvation. It would present the same symptoms and post-mortem appearances as the diseases of which I have already spoken. But such symptoms are not present in most cases of rickets. On referring to my list I find that 54 per cent. of my cases are stated to have been well nourished, 14 per cent. not wasted, and only 30 per cent. ill-nourished. It must be borne in mind that the proportion of starch to the really nutrient elements of the dietary is seldom very great. Thus in 60 per cent. of my cases the children were suckled up to the age of nine months; in 27 per cent. for periods varying from one to six months; while only 13 per cent. of the whole number never had the breast at all. These were usually supplied with an abundance of cow's milk. In those very rare instances in which milk is altogether withheld, the child developes well-marked scurvy in conjunction with rickets. Of this I have seen more than one example. Moreover, there is clinical evidence that an infant may suffer from prolonged ill-health, may grow pale and waste away, may be severely scourged by syphilis, and yet escape rickets. I have notes of such cases, and I find that, in every instance, the mother's milk was the only food given. Lastly, it is conceivable that starch may operate indirectly by interfering in some way with the assimilation of fatty matter. The possibility appears to meet all the facts of the case more completely than any other, and is strengthened by what we know of the remarkable curative effects of cod-liver oil. In conclusion, I shall briefly notice three objections often urged against the hypothesis that rickets is a consequence of the premature administration of starchy food. First, the occurrence of congenital rickets. Is an infant ever born with the disease? I agree with Dr. Fagge in thinking that no sufficient proof exists of the identity of so-called "fœtal rickets" with the disease we are now considering. Secondly, the occasional development of rickets at puberty. This has been more than once asserted to occur, but I know of no decisive evidence on the point. Thirdly, the geographical distribution of the disease. We find an American surgeon[2] stating that "rickets is a disease so rarely met with in our country, that I have no experience which would entitle me to speak of it authoritatively from my own observation." We can hardly suppose that infant feeding in the United States is very different from infant feeding here. Is it possible that the author is alluding not so much to rickets as to those rachitic deformities of the limbs which call for surgical interference, and which must be ascribed less to the disease than to its improper management at an earlier period of its course? Should the three objections I have specified be found to rest on an assured foundation, any theory which connects rickets with the administration of starchy food—or indeed with any error of diet—must be given up. Those, however, who, like myself, are inclined to hold such a theory, at any rate provisionally, as according better with the facts hitherto observed than any other, may be excused if they hesitate to abandon it until driven to do so by the unanswerable logic of well-authenticated specimens brought before the Society.—Dr. FAGGE asked what proportion of non-rickety children attending the same hospital were under the same hygienic conditions.—Dr. CRISP asked how long the animals experimented on lived.—Dr. BAXTER replied that he was fully alive to the fallacy suggested by Dr. Fagge's question, and he had satisfied himself that it did not vitiate his statistics. The animals never survived longer than two months, and most of them died much sooner.

Dr. BARLOW brought forward a case of so-called Fœtal Rickets as a contribution to the question as to whether there is a true fœtal rickets in any sense comparable with infantile rickets. For the fœtus from which these specimens were taken he was indebted to Dr. Herman. It was believed to be of full term, and was born dead. There was nothing in the family history which would throw light upon the case, with the exception that one previous child out of a large number had been born with turned feet. The proportions of the child were very remarkable. There was nothing special about the head and trunk, the neck was short and thick, the limbs were very stunted. The upper limbs placed close to the body did not extend further down than the umbilicus, and the lower limbs from the ilium to the heel only measured each five inches. The lungs were not expanded. No gross disease was found in the viscera. "The specimens to which I wish to call attention are the bones of the fœtus. To begin with the limb bones. The clavicle is natural. It is longer than either humerus or ulna. It will be remembered that the clavicle is a membrane formed bone. The scapula shows much thickening of bone where the cartilage joins it, so that there appear to be two thick lips, including the edge of the cartilage. The

[2] Markoe, Diseases of the Bones. New York. 1872.

humerus shows very large upper and lower epiphyses and a short stout shaft. On section the epiphyses are cartilaginous throughout. There is no irregularity in the line of ossification, and there is no massing up of pale bluish material such as is seen in a typical rickety long bone at the junction of shaft and epiphyses. The bone of the shaft is hard and compact on the surface and cancellous in the middle, and there is more indication of a medullary canal than is seen in full-term fœtal long bones. At the outer side of the upper extremity there is a very slight extension of bone over the base of the great tuberosity. There is a manifestation of a tendency to cupping round the epiphysis, which is very marked in Mr. Shattock's specimens, to be presently exhibited. The radius is exceedingly oblique in its direction, and presents a striking sigmoid curve with the pronator tubercle in the centre. In the lower extremity the only points to which I will refer are: (1) the remarkable bend of the femur concave on the flexor aspect, (2) the absence of an ossific centre in the lower epiphysis; and (3) an invasion of fibrous tissue from the periosteum, spreading at the junction of the shaft and epiphysis. The sternum and costal cartilages show no ossification. The ribs present distinct nodosities; but instead of being at the junction of rib and cartilage, these nodosities definitely belong to the bone, and each consists of a bony cup which surrounds the end of the cartilage like a sheath. This cup, in fact, is quite similar to the rudimentary sheath pointed out in the humerus and scapula. There is a similar cup at the vertebral end of the rib. There is nothing special about the vertebræ. In the cranium the clivus is very steep, the foramen magnum small and funnel-shaped; and what is most noteworthy, there is complete anchylosis between the basi-occipital and the basi-sphenoid. This is one of the cases which would have been classed some time ago as fœtal rickets; but there are essential differences alongside of some superficial similarities. First, it will be seen that, with regard to the long bones, the epiphyses generally are enlarged, at all events as compared with the shafts. In true rickets it is not the whole epiphysis, but the line of ossification which is swollen; but here it is the whole epiphysis. Second, there are signs of intrusion of fibrous tissue from the periosteum in between the shaft and the epiphysis, and also of the formation of a sheath-like prolongation around, and external to the base of the epiphysis. This is well shown in the nodosities of the ribs. Third, the shaft is singularly hard and compact, there is no trace of any fracture, and the bendings which occur are exaggerations of the normal bends. There is no thickening of periosteum or rarefaction of medullary parts of bone such as is described in rickets. Fourth, the stunted growth in length of the shafts, whilst the thickness is normal or perhaps excessive, is quite different from anything seen in rickets. Now, it might have been argued that in this child there had been at one period of intra-uterine life a rickety condition, which, having run its course, had left merely hardened bent bones. But a microscopic examination of the ends of the bones, I think, gives no support to this view. Some sections made for me by Mr. Boyd show that the cartilage in the greater part of the epiphysis is not materially altered, but along the line of ossification the cartilage cells are greatly enlarged, and the vertical row formation, which is so striking a feature in normal ossification, is here conspicuously imperfect. Thus, unlike true rickets, there is no proliferation of cartilage; indeed, the ossifying cartilage is very scanty in amount, and the primary bone areolæ do not present the characteristic organ-pipe arrangement. The subsequent development appears to depend mainly on the periosteum. Thus it happens that the growth of the shaft in length is arrested whilst it grows normally, if not, even to an exaggerated degree, in thickness. The in-growth of fibrous tissue between epiphysis and shaft, and the cup-like sheath at the base of the epiphysis, are developed from the periosteum. Several years ago specimens like this were investigated by Heinrich Müller and Urtel, and they pointed out how essentially different this lesion was from true rickets, and Urtel proposed for it the name of fœtal chondritis. Two years ago Professor Eberth published a monograph on the subject, including some observations of his own on a deformed calf, which showed similar lesions. Professor Eberth shows that with some variations this condition of long bones is one of the characteristics of cretinism. The premature union of the basi-occipital and basi-sphenoid which was pointed out by Virchow as occurring in a cretin's skull which he examined, has been made too much of in the various accounts of cretinism. Eberth shows that it is not constant in cretins. It occurs in this specimen, and has been found in others, but not always. But the peculiar arrest of growth in the length of the bones from defective proliferation and row formation of the embryonal cartilage is probably a constant feature. The disease—'achondroplasy' is the term suggested by M. Parrot—may be defined as a defective plastic power in the embryonal cartilage."

Mr. S. G. SHATTOCK related some cases of Osseous Lesions in the Fœtus. He noticed altogether nine cases; one of his own, five in the Museum of the Royal College of Surgeons, three in St. Bartholomew's. All these specimens exhibit shortening of the limbs, curvatures of the lower, and in most cases synostosis of the basi-occipital and post-sphenoid bones. And the specimens in which the soft parts still remain exhibit the facial characteristics of cretinism, depression of the root of the nose, flattening and upturning of its tip, thick rounded edge, &c. And these showed, also, a general accumulation of subcutaneous fat, such as is recorded of nearly all such cases. The histological appearances of sections of the femur of the most typical of these specimens showed the line of ossification to be irregular; the cartilage cells in front large, round or oval, and collected in groups, without a serial arrangement. Ossification had extended irregularly into the cartilage without the production of primary areolæ, and the proper alveolar formation had been effected by excavation of the calcified cartilage through means of the advancing medullary tissue. Both Eberth and Müller describe cretinism in the calf, and there is a fœtal bitch puppy (No. 318, Teratological series, Mus. Coll. Surg.) which presents the characteristic cretinous habit. These specimens as a whole exhibit much that is in a general way like rickets—viz., the shortness of the long bones, the comparative enlargement of their growing ends, their deformities of curvature, and the thickening of the flat bones. The essential error of nutrition would appear to consist in an histological spoiling of the cartilage concerned in the ossification-process which fails to furnish a medium for bone-formation. And the histological accounts of such cases contain evidence of analogy between this condition and that of rickets, not a progressing rickets, for in all these cases the osseous substance has been found firm, but a sufficient analogy to render it probable that some such cases represent recoveries from rickets which has both arisen and passed away *in utero*. However, there are very few cases on record in which the bones of the fœtus have been observed unnaturally soft, and in some of these (to judge from the multitudinous fractures recorded of them) it is less probable that the condition was one of rickets than one of those, as yet, obscure forms of disease which render the bones fragile rather than flexible.

Dr. LONGHURST regarded the disease as due to imperfect nutrition, a consequence of civilisation and its attendant evils. He did not regard the disease as syphilitic. It is certain that all syphilitic children are not rickety. For twenty years of his life he had been engaged in treating the children of syphilitic parents, many of whom were syphilitic, but they were not rickety, because they were not subject to its causes, being well fed, well clothed, under good sanitary conditions, and enjoying frequent changes of climate. Tubercle and rickets may coexist, but a markedly tubercular child seldom, if ever, becomes rickety. The chemical change in the bones was a marked feature of the disease, and pointed to its being a malnutrition rather than a diathesis. He agreed with Dr. Crisp in thinking much light might be thrown upon the subject by considering the disease in other portions of the animal kingdom. Though the disease is seen in the native children in the city populations in Africa and India, it is not seen in the country districts.

Mr. SPENCER WATSON, after careful investigation, was convinced that rickets was not a form of congenital syphilis. He thought that much might be learnt by a careful study of the geographical distribution of the disease, and quoted the opinion of Dr. Chevers and others to show its rarity in India, and in districts where five members of a family were often suckled together, and whether a case had been seen of a girl seventeen years of age still unweaned. He suggested that the inquiry would be a fitting one for a committee of the Society.

Dr. GOODHART was of opinion that in some cases of rickets there was actual enlargement of the spleen. He had seen it in four cases after death, and the cases in which it was present might by their pallid look be easily picked out

from others without any examination of the belly. The change, he had found, was best described as chronic congestion; the organ was large, and tough, capsule thickened, the pulp homogeneous, with excess of hyaline fibroid material in the stroma. This, when exaggerated and viewed in their sections, would give the glue-like appearance spoken of by Sir W. Jenner. He had only noticed the enlargement of the spleen in every possible association with rickets thirty-seven times; it was therefore infrequent, and he thought, with Drs. Geo and Dickinson, that it was not an integral part of the disease, but due to some antecedent change. He was surprised the state of the blood had not been referred to; it was certainly most abnormal. The red corpuscles are in three or four sizes; there is much granular material, and where the spleen is enlarged there is some amount of leucocytosis. He should call the disease a blood condition, and the question arose why the cartilage of all tissues should take on such a generated growth, probably because it was independent of highly elaborated blood elements. He could see no *à priori* reason why rickets should not exist in the fœtus. While rickets was a perverted or arrested development, osteo-malachia is a disintegration of a fully-formed tissue.

Dr. FAGGE expressed his thanks to the various speakers, who had added so much interest to the discussion, which would no doubt be of great use in stimulating research. He had been told that he had misrepresented M. Parrot, but though he had been unable to find the expression he quoted in his published speech, he was of opinion that he had heard him make use of it. He thought it would be well to get rid of the word diathesis, as no two people mean the same when they use the word. For instance, would Sir W. Jenner allow with the President that scorbutus was a diathesis? And would the President agree with Sir W. Jenner in calling inherited syphilis a diathesis? He was extremely sorry if he had not done justice to Sir W. Jenner's lectures on rickets; they were the starting-point of all that is known in this country on the subject. He himself had first learnt what he knew from them, and had constantly referred to them in later years; and it was because he thought he knew the lectures too well that he attributed the observation of the tenderness of the muscles and bones to another source. He should be glad to say anything to induce anyone to read the lectures for himself.

The PRESIDENT conveyed the thanks of the Society to Dr. Fagge and the other members who had kindly taken part in the discussion.

The meeting then adjourned.

Reviews and Notices of Books.

An Introduction to the Study of Fishes. By ALBERT C. L. G. GÜNTHER, M.A., M.D., Ph.D., F.R.S., Keeper of the Zoological Department of the British Museum. Pp. 720. Edinburgh: Adam and Charles Black. 1880.

THE number of original works in English on Ichthyology is remarkably limited. When we have mentioned Owen's article in his "Comparative Anatomy and Physiology of Vertebrates," Rymer Jones's article in the "Cyclopædia of Anatomy and Physiology," and that of Sir J. Richardson in the eighth edition of the "Encyclopædia Britannica," we have almost given all the works to which the student could be referred for a good general account of the structure and classification of fishes. We are glad, therefore, to welcome Dr. Günther's work as an important and much-needed addition to this department of our knowledge, written by one who is well known to have devoted many years of his life to the study of this branch of natural history, and to have had at his disposal the unrivalled stores of the British Museum. The work is divided into two parts, the first dealing with the history and literature, the anatomy and physiology, the growth and variation of fishes, and their distribution, both geologically, and in existing seas, rivers, and lakes; the second part deals with their classification and zoological characters. The first part gives in full detail the characters of the various organs; the skeleton, muscles, nerves, organs of sense, of nutrition, respiration, circulation, &c., being treated in successive chapters.

Dr. Günther supplies a useful table of the synonyms of the bones of the head given by different authors, and we notice that he does not follow in all cases the newer lights of Huxley and Parker, but retains the names conferred upon them by Owen. We need hardly say that the anatomical part is described in such fashion as to leave little to be desired, though we should have been glad of a little more detail in regard to the nervous system, which is rather curtly given, and might with advantage have been more fully illustrated. An entirely new branch of Ichthyology is opened up in the section on "The Fishes of the Deep Sea." It was long thought that the abysses of the ocean must be entirely destitute of life, partly from the total absence of light and partly from the enormous pressure which must be sustained by any animal living at depths of ten or fifteen thousand feet or more, the pressure amounting to one ton per square inch for every 1000 fathoms. The dispersion of this error is one of the important results of the observations made by the naturalists on board H.M.S. *Challenger*.

Many fish were dredged in this expedition from great depths, and the animals thus obtained present many peculiarities. Their connective tissue is so weak as to break down under the slightest pressure. The osseous and muscular systems are very feebly developed. The bones possess a fibrous, fissured, and cavernous texture; and are light, with scarcely any calcareous matter, so that the point of a needle will readily penetrate them without breaking. The ligaments connecting the bones and vertebræ break with great facility. The muscles are thin and easily torn. They are all carnivorous. The lateral line is widened, and the muciferous system is greatly developed. The colours are simple. The eyes, which in fish living habitually between 80 and 200 fathoms, are large, become smaller, or are altogether lost, beyond the latter depth, and the defect of vision is compensated for by tentacular organs of touch, or by phosphorescent organs, the anatomical characters of which are very remarkable. Fish from the greatest depth are destitute of eyes. The Bathyophis ferox was obtained from a dredging in which the dredge descended 2750 fathoms, and is believed to be the deepest sea fish known. A long list is given of deep-sea fishes, though, doubtless, some may have been caught by the dredge in its ascent. In regard to the distribution of fishes in time, Dr. Günther expresses no opinion as to the nature of the minute, slender, pointed, horny bodies, bent like a hook, and with sharp opposite margins, which have been found in deposits belonging to the Lower Silurian and Devonian systems, and have been described under the name of Conodonts. By some these have been held to be the teeth of extinct fishes, whilst others have suggested they are the remains of annelids and molluscs. He considers the first undeniable evidence of a fish or indeed of a vertebrate animal occurs in the Upper Silurian rocks, in a bone-bed of the Downton sandstone, near Ludlow. It consists of compressed, slightly curved, ribbed spines, of less than two inches in length (*onchus*); of small shagreen scales (*thelodus*), the fragment of a jaw-like bar with pluricuspid teeth (*pleurodus*), the cephalic bucklers of what seems to be a species of pteraspis, and finally coprolitic bodies of phosphate and carbonate of lime, including recognisable remains of the molluscs and crinoids inhabiting the same waters. But no vertebra or other part of the skeleton has been found. The fish was probably a plagiostome. The fish remains of the old red sandstone, or Devonian series, can be determined with greater certainty. They consist of spines named

ichthyodorulites, belonging to chondropterygians and the remains of various ganoid fishes, with others belonging to the placodermi. Devonian fishes are frequently found enclosed in "nodules." These are elliptical flattened pebbles which have resisted the action of water in consequence of their greater hardness, and this greater hardness is due to the dispersion in their substance of the fat of the animal which decomposed in them. The flags of Caithness, which belong to the Devonian era, and which contain an abundance of these fossil remains, emit a peculiar smell when freshly broken. In the Carboniferous system the chondropterygians and ganoids have numerous representatives. The fishes of the Permian group resemble those of the carboniferous. The chief forms of the Trias are shark-like fishes, cestracions and ganoids. Ceratodus appears for the first time. The Lias is very rich in piscine remains, one hundred and fifty-two species having been described. Sharks, rays, and sturgeons make their first appearance, and the homocercal termination of the vertebral column begins to supersede the heterocercal. The Cretaceous group presents clear evidence of the further advance towards the existing fauna; whilst in the tertiary epoch the teleostians have almost entirely superseded the ganoids. A few families, like the freshwater salmonidæ, seem to have put in their appearance in post-pliocene times.

The Geographical Distribution of Fishes is treated of at great length by Dr. Günther. He divides them primarily into freshwater and marine, which, however, run into one another in such a way as to render the distinction very vague. Thus in every large river truly marine forms may be found ascending for hundreds of miles, not periodically, but sporadically, evidently the commencement of a change of habit, which ultimately converts the marine into a freshwater fish. So, again, geological changes may occur so slowly as to give time for accommodation to new conditions. A remarkable instance of this is seen in the case of the Baltic, which, by the gradual elevation of Scandinavia, has become separated from the Arctic Ocean, and by the excess of supply of freshwater over evaporation, has become almost fresh in its northern part, and yet nine species belonging to the Arctic Ocean have survived the change.

The second part of Dr. Günther's work is the systematic and descriptive part, in which the Families of Fishes are shortly diagnosed, and some account given of the species which, by their structural peculiarities, or by their usefulness to man, possess special interest. Typical examples of nearly all the families are illustrated by means of excellent woodcuts, and short notes are appended of any remarkable features in their life history. Interesting particulars are given, for example, in regard to the pilot fish, stickleback, cod, flying fish, salmon, and others.

In regard to the salmon, the points which may interest many of our readers who are lovers of the gentle craft may be here summarised. In the first place, no fossils of the fresh-water forms of the salmonidæ are known; but fossils of the marine forms have been found in the chalk of Lewes. Their life history presents many points of difficulty, and the species are not as yet satisfactorily determined. Some of the species interbreed, and the hybrids intermix again with one of the parent species, thus producing much confusion to the taxonomist. The coloration again is subject to variation, and cannot be relied upon for purposes of classification. The young, however, of all the species are barred. The moulting of the scales coincides in the migratory species with their sojourn in the sea. The size may vary to an extraordinary extent with food and other conditions. Thus Salmo fario in a small mountain pool may never exceed eight ounces in weight, but in a large lake or river may run to sixteen pounds. Again, the proportions of the various parts of the body to one another varies exceedingly in one and the same species. The salmon offers a most remarkable instance of irregularity as regards the age at which the individuals arrive at maturity. The male parr, which Dr. Günther entertains no doubt is the young of the salmon, may become sexually mature when only seven or eight inches long. Salmon in the grilse state make their appearance every year at the mouth of the Thames, ready to reascend and to restock this river as soon as its poisoned water shall be sufficiently purified to allow them a passage. Let us hope that this good time may soon come.

Professor Günther's book contains much that will interest readers of every class, and has been got up in a manner worthy of Messrs. Black.

OVARIAN DYSMENORRHŒA, WITH RETROFLEXION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—In the "Mirror" of hospital practice, THE LANCET, Dec. 4th, a case is related with the above heading as having been under the care of Dr. Herman at the London Hospital. As "Wynn Williams's" stem and shield is prominently referred to in the history of the case, I hope I may be permitted to make a few remarks thereon. From the history of the case, in addition to the "tenderness on pressure over the ovaries," "much pain was caused by pressure on the body of the uterus," and "per rectum there was greater tenderness on each side of the uterus, the most being on the left side." The patient also suffered from leucorrhœa and much pruritus of the vulva, and too frequent micturition. She was treated as an out-patient between five and six months. "There was no improvement in the symptoms, which, if altered at all, got rather worse. On May 18th, 1878, admitted into the hospital, and on May 30th "Wynn Williams's" intra-uterine stem and shield was put in.

No record of any other previous treatment is given whilst in the hospital—whether or not the uterus was depleted by leeches or otherwise, &c., to allay the pain and tenderness, so as to remove the subacute metritis and ovaritis, from which the patient was evidently suffering. Many of your readers have, in all probability, expressed their astonishment that metritis, perometritis, and pelvic abscess did not result after the introduction of an intra-uterine stem under such conditions.

Whenever there exists symptoms of acute or chronic metritis, ovaritis, &c., it is essential first of all to subdue these before having recourse to the use of an intra-uterine stem. One word in conclusion, "Wynn Williams's" stem and shield was constructed more especially for the treatment of anteflexions. I do not mean to say that I have never used them in other conditions of the uterus, but I have always adapted the shield according to the nature of the flexion; in fact, to introduce the stem and shield in a case of retroflexion the shield would have to be worn upside down, as anteflexion is the exact reverse of retroflexion.

Query, may not the fact of the patient having become pregnant be due to the wearing of the stem, which I have frequently found to straighten the canal of the uterus without entirely removing the exterior effects of the flexion?

Yours, &c.,

Dec. 16th, 1880. A. WYNN WILLIAMS.

A CENTENARIAN.—The following is extracted from the *Ormskirk Advertiser*, but we have received private authentication of the truth of the statement of age:—On Monday morning last Mrs. Hannah Heaton, who had reached the advanced age of 101 years, died at the house of her daughter, Mrs. Huyton, Pygon's-hill, Lydiate, where she had resided for some time. Although she had attained such a great age, Mrs. Heaton retained her mental faculties to the last, and was able to hold conversation with her neighbours and friends on current topics to an astonishing degree, her memory being marvellous. Up to a week ago she was able to take a walk, sometimes extending half a mile, without help.

THE LANCET.

LONDON: SATURDAY, DECEMBER 25, 1880.

Introduction.

THE year 1880 has been historical indeed in the political sense. It has been so much so, and so disturbing, as to make professional and scientific men thankful for arenas of quiet unsensational work and employment in which progress is more regular and unagitated. We may notice two or three facts of almost physiological interest in connexion with great historical events in the year. On the retirement of one Premier another was called to take his place, full of physical and mental vigour, though over seventy years of age, who, after the labours of an arduous session, was able, under the guidance of Dr. Andrew Clark and Sir William Jenner, to pass successfully through a sharp pyrexial attack. The other event of as much physiological and historical interest was the march in three weeks of our troops under the able lead of General ROBERTS from Cabul to Candahar, with the loss of only two Europeans, seven sepoys, and twenty-one camp followers. Such a march was not achieved without medical anxiety, and it is not without significance recorded that the medical officers of the expedition were never absent from their posts for one hour. Though the mortality was slight, we shall probably hear more cases of sickness. The distress of Ireland has not been without such alleviation as comes from better administration and more efficient medical aid; and the disastrous fevers of former years of famine have not been repeated on any large scale.

Anatomy and Physiology.

In Anatomy and Physiology, and the allied subjects of Histology and Physiological Chemistry, several important treatises have been published, and, as usual, a very large number of separate papers or memoirs. Foremost amongst the larger works are the volumes of Dr. L. HERMANN'S "Handbuch der Physiologie," dealing with the blood and circulation, and with the physiology of secretion and digestion. This cyclopædia, to those who have mastered German, affords the best and most complete *résumé* of the science of physiology extant; though it does not constitute so marked an advance on previous knowledge as was the case with the old "Handwörterbuch der Physiologie" by WEBER, published between the years 1842 and 1853. It has the advantage, however, of being brought out more rapidly, and thus better representing the actual state of the science. Next to this is the Physiological Chemistry of Prof. GAMGEE, which well sustains the repute and scientific position of its author. It is to be succeeded by a second volume, in which the secretions will be specially considered. A smaller treatise by WURTZ, entitled "Traité de Chimie Biologique," may also be advantageously consulted. One of the best physiological textbooks, if not the best we have seen, is that just issued by LANDOIS, a translation of which would be a boon to the English reader, and we trust will be undertaken by some industrious student. New editions of the Manuals or Textbooks on Physiology by Dr. KIRKES, under the editorship of Mr. MORRANT BAKER, by Dr. FOSTER, and by Dr. CARPENTER, under the editorship of Mr. POWER, in English, and of those of BEAUNIS, BÉCLARD, FUNKE, and RANKE have appeared, as well as of WUNDT'S "Grundzüge der Physiologischen Psychologie." MILNE EDWARDS has brought his splendid work, "Leçons sur la Physiologie et l'Anatomie Comparée," to a close in the fourteenth volume. It is a model of the French style of exposition, though the arrangement adopted is rather unusual. There is a text clear, condensed, luminous; then on the same page notes, giving in detail many of the points only alluded to in the text; finally, and still on the same page, is the bibliography, which is extraordinarily copious and exact. HARTMANN of Berlin has added another to the numerous handbooks of Human Anatomy; the sections on the muscles and arteries are accompanied by rather coarsely coloured but distinct woodcuts. Under the title of "Anatomische Varietäten," KRAUSE has issued an appendix to his large work, the "Handbuch der Menschlichen Anatomie," which will be found useful to all teachers of anatomy, and indeed to all operating surgeons, since it gives details with regard to topographical anatomy and in regard to weight and measurement not elsewhere obtainable. A good German translation of QUAIN'S "Anatomy," containing much additional matter, is in course of publication by SCHWALBE.

The art of Histology has been advanced by the publication of the "Leçons sur le Système Musculaire" of M. RANVIER, though it is not clear why, if he had time to finish this treatise, he could not complete his half-published "Leçons d'Anatomie Générale," which seems to have stopped at the fifth part, to the great inconvenience of purchasers of the earlier parts. The more important contribution to this branch of physiological technic, however, is the handsome Atlas of Histology, just completed by KLEIN and NOBLE SMITH, the numerous drawings in which are for the most part original, and very faithful renderings of the objects they represent.

Though not exactly belonging to either Anatomy or Physiology, yet, as constituting very valuable and interesting additions to Biological science, two works must be mentioned: first, Mr. DARWIN'S "Movements of Plants," which, like all the volumes he has written, presents in short compass the results of an immense series of observations in this instance on a subject of surpassing interest; the other is the magnificent volume which constitutes the first instalment of the scientific results of the exploring voyage of H.M.S. *Challenger*, and which contains valuable papers by DAVIDSON on the Brachiopoda, by KÖLLIKER on the Pennatulida, by GÜNTHER on the Shore Fishes, by PARKER on the Development of the Turtle, as well as others, proving indisputably the existence of a large fauna in the abysses of the ocean hitherto held to be void and tenantless. The Ray Society have issued two well-illustrated volumes of BRADY'S "British Copepoda." A new journal, the *Archives de Biologie*, has appeared in Belgium, under the able superintendence of ED. V. BENEDEN and of CHARLES V. BAMBEKE, and the four parts that have been published contain some good articles, especially two by V. BENEDEN himself on Development. The *Journal of Anatomy*, under Professor HUMPHRY'S guidance, has been punctually issued,

and contains some excellent papers, amongst which we may particularly notice one by Dr. CREIGHTON on Bovine Tuberculosis in Man, and one by Dr. BEATSON on the disease called "Sturdy" in sheep.

Amidst the multitude of Memoirs on Physiology, it is here only possible to select a few that may be regarded as presenting special features, and even of these little more than the headings can be given. Taking the subject of Digestion, to begin with, it may be observed that WURTZ has investigated the peculiar properties of the juice obtained by incisions made into the green fruit of Carica papaya, which possesses a digestive property, and is capable of dissolving and peptonising albumen. The active principle is papain, which seems to be analogous to trypsin — the albumen-digesting ferment of the pancreas; and it may hereafter be usefully employed therapeutically as a digesting agent. Various observers have paid particular attention to the formation of peptones. SCHMIDT-MUELHEIM has been led from his experiments to accept as peptones only those substances which give no cloud with acetic acid and ferrocyanide of potassium, and believes he has determined the existence of a stable product intermediate between albumen and peptone, to which he has applied the term propeptone. His attempts to determine the paths by which peptones are absorbed from the intestinal canal demonstrate that the blood of a fasting dog contains no peptone, though it is present in the blood of an animal that has been fed twenty-four hours previous. On the other hand, none was then contained in the chyle, though this was milk-white. Experiments in which solutions of peptone were injected into the vessels showed that this substance rapidly disappeared, so that whilst one minute after the injection nearly the whole quantity injected could be recognised, after six minutes it was reduced to a trace, and after ten minutes had entirely disappeared. The peptone injected so changed the quality of the blood that it no longer coagulated on withdrawal from the vessels; the addition of a little fibrin ferment, however, immediately caused coagulation to take place. An important fact in view of the therapeutic injection of peptone which has been recommended was made out—namely, that the injection of this substance lowers the blood-pressure to an extraordinary extent, the pressure of the blood in the carotid artery of a dog falling from 208 mm. to 12 mm., and death rapidly ensuing. ALBERTONI, in following up this inquiry, made the observation that considerable differences occur in different animals, the injection of peptone into the vessels of dogs preventing the coagulation of their blood, though it is ineffective in rabbits and in sheep. The action of the peptones in dogs seems to be essentially on the white corpuscles. His experiments show further that the peptones when injected into the vessels rapidly disappear from the blood, and enter the tissues and organs of the body. Some good lectures on the Physiology of Digestion were delivered by EWALD, and have been collected into a small handy volume, which practitioners may consult with advantage as giving all recent work on the subject.

MAYDL has investigated the point whether the glycogen obtained from the liver and from the muscles in animals fed on meat and potatoes, on glycerin, on inulin, and on starch, was in all instances identical in composition, and produced the same amount of sugar as tested by polarisation experiments. He satisfied himself that it was identical, and hence argues that glycogen cannot result from a direct conversion of these several substances into glycogen, but that this must be a special product of the functional activity of these tissues. Hæmoglobin crystals may, according to WEDL, be obtained in the course of from twenty-four to forty-eight hours, even from those kinds of blood which do not readily crystallise by the addition of a little strong pyrogallic acid. BÖGYES has examined the hæmin crystals obtained from the blood of a large number of mammals and birds, and finds that in all instances the form is essentially similar, and that they do not, as usually stated, belong to the rhombic, but to the monoklinic or to the triklinic system. The place of development of the red blood-corpuscles in birds rendered anæmic by bleeding has been investigated by BIZZOZERO and TORRE. The birds experimented on were the cock, pigeon, crow, finch, wild goose, swallow, and sparrow, and they adduce strong evidence to prove that the new red corpuscles are developed in the red marrow of the bones. Similar results have been obtained by OBRASTZOW, who describes in considerable detail the transitional forms between hæmatoblasts or nucleated red cells and true red corpuscles. The same results have been arrived at by RINDFLEISCH, who states that the veins and capillaries of the red marrow possess no proper wall, whilst that of the arteries is extremely delicate. MOENS discusses the formation of the first wave in the descending limb of a sphygmographic tracing. He divides the contraction of the ventricles into three periods, the first lasting 0·085 of a second from the commencement of the contraction to the opening of the semilunar valves; the second lasting 0·1 sec. which represents the period of complete patency of the semilunar valves, and the third lasting 0·115 sec., which extends to the moment when the valves close. The movement of the blood attains its greatest velocity towards the close of the second period. The recoil of the vessels which closes the semilunar valves occasions a small secondary wave, which is propagated from the valves outwards, and appears as the first wave in the descending limb. ROY and BROWN contribute a paper on Blood-pressure and its variations in the arterioles, capillaries, and smaller veins to the *Journal of Physiology*, a journal that is excellently conducted by MICHAEL FOSTER of Cambridge, but which, we fear, is scarcely supported sufficiently by the profession to prevent its editor and his colleagues, with the publishers, suffering large pecuniary losses with each number. Messrs. ROY and BROWN find that the capillary vessels possess contractility rather than elasticity, and that these are capable of undergoing individual variations of calibre, and they believe that such variations stand in relation with the requirements of the tissue. A very long and elaborate memoir on the Time Relations of the Excitatory Process in the Ventricle of the Heart, also by Professor BURDON-SANDERSON and F. J. M. PAGE, appears in the *Journal of Physiology*. They show that the rate of propagation of the excitatory state is about five inches per second, and the duration of this state is in winter frogs from 1·6 to 1·8 inches at a temp. of 12° C. Each part of the surface of the ventricle is, during the excitatory state, negative to every unexcited portion. The local application of heat shortens the duration of the excitatory state; injury weakens or diminishes the excitatory state.

CHRISTIANI believes he has established the existence of a respiratory centre in the floor of the third ventricle, which can be excited to activity through the optic and auditory nerves when stimulated. This centre induces arrest of respiratory movement in the condition of full inspiration. OSCAR LANGENDORFF adduces various facts which he interprets in favour of the existence of one or more respiratory centres in the spinal cord. KRONECKER and MARCKWALD have shown that the ordinary respiratory contraction of the diaphragm is to be regarded as a brief tetanus, since in order to produce the regular and ordinary curve of inspiration twenty excitations per second must be applied to the phrenic nerves. A discussion upon the normal curve of respiratory pressure has been carried on in Pflüger's *Archiv* between EWALD and GAD, in which the numerous points demanding attention in a proceeding apparently so simple are well brought out. The influence of mixed and monochromatic light on the excretion of carbonic acid by animals has been studied by MOLESCHOTT and FUBINI. They support the statement now generally accepted, that white light, both by its action on the eyes and on the skin, increases the excretion of carbonic acid gas. In regard to monochromatic light, the excretion of carbonic acid is as free in violet as in white light; red light somewhat raises the amount in warm-blooded animals, but has no effect in the case of frogs. In opposition to the generally accepted doctrine, SPECK finds that cooling of the external skin exerts little or no influence upon the oxidation processes in the body. The first action of cold to the surface, as in the administration of an ordinary cold bath, is to cause constriction of the cutaneous capillary vessels, and thus to drive into the general circulation the blood contained in them. Then, since no blood traverses these vessels, there is no loss of heat in the blood, and the temperature temporarily rises. On emergence from the bath, however, the cutaneous capillaries relax, and then the blood, as it traverses therein, becomes cooled down, and on re-entering the general circulation reduces it below the normal. The different results obtained by different observers he attributes to variation in the deviation of the application of the cold, and of the spasm of the vessels. Some interesting observations upon the temperature of the head have been made by MARAGLIANO of Genoa, from which he concludes first, that the temperature outside the skull is a correct index and exponent of the temperature of the brain within, though this has since been disputed. Secondly, that the temperature of the left side of the head is always higher than that of the right. Thirdly, that the temperature of the frontal and temporal regions taken at the external orbital process and over the mastoid process, is always higher than the occipital region taken over the occipital protuberance; and lastly, that intellectual activity, age, and sex exert considerable influence over the temperature of the brain. The most important histological discovery in regard to the structure of the nerves is undoubtedly that which has quite recently been published by ENGELMANN, who is a reliable observer, to the effect that the axis cylinder, which has always hitherto been regarded as continuous and uninterrupted from one extremity of a nerve to another, is in reality discontinuous; in the frog at least it presents constricti ns. DASIDA calls attention to a fact that has hitherto been overlooked—namely, that the ganglion on the posterior roots of the spinal nerves, which is always stated to be single, is in reality in many instances double, or even in some instances treble. The statements of BROWN-SÉQUARD, so long taught in our schools, in regard to the paths of conduction of motor impulses and sensory impressions on the spinal cord, have of late years been frequently impugned. The latest experiments are those of WEISS, who has made numerous sections of the cord in dogs at the level of the last dorsal vertebra. He finds that immediately after division of one lateral half of the cord in this region there is complete loss of motion and sensibility on both sides below the section. A few days after the operation the motion of the leg of the uninjured side becomes perfectly restored, whilst the leg of the same side remains paralysed. The sensibility of both legs is lowered, and apparently to an equal degree. Hyperæsthesia was never present. In the course of three or four weeks the power of moving the leg of the side of the hemisection often undergoes remarkable improvement, whilst the sensibility remains unaltered. WEISS believes that each lateral column of the cord contains both sensory and motor fibres for the two sides of the body, the former being equally, the latter unequally, distributed. STRICKER and UNGER have examined the structure of the Brain in sections stained with potassium, gold-chloride, and then hardened in alcohol. This method seems adapted to bring into extraordinarily distinct relief the various forms of cells and their ramifications, and to establish a very intimate relation between the connective-tissue cells and the nerve cells.

The precise origins of the Cranial Nerves have been investigated and delineated by DUVAL, whose observations agree well with those of LOCKHART CLARKE. WOLF observed a case in which the function of the Chorda Tympani was clearly determined in consequence of its accidental division during the operation of division of the tympanum. The effects observed were as follows: loss of the sense of taste for sweet, salt, bitter, and acid flavours on the same side for the anterior two-thirds of an inch. There was also loss of sensibility for tactile and thermic impressions. It is remarkable that complete recovery of the sense of taste took place eight weeks after the section. BLAU had a case in which the chorda tympani was exposed; mechanical irritation of it excited an acid taste in the tongue on the corresponding side, and a trembling of the muscular fibres. Some recent experiments by BIGELOW on animals, though less precise, lead to the same conclusions. The quantity of Cholesterin contained in the Brain has been determined by BENEKE, and shown to reach the large amount of 2·12 to 2·34 per cent. of the fresh brain.

In Development, HIS has contributed some important observations on the genesis of the peripheric nervous system, and has published a large work in folio under the title of "Anatomie Menschlichen Embryonem." BALFOUR has collected his researches, extending over several years, into one volume of "Comparative Embryology," which contains a large number of original and very interesting researches. KLEIN has studied the development of the Spermatic Cells and Spermatozoa. Dr. MARTIN is doing good work in the Biological department of the Johns Hopkins University in America; and an excellent memoir

on the development of the Oyster, by Mr. BROOK, emanates from the same source.

Pathology.

In the department of Pathology the year has not been unproductive. The foremost place among the investigations must be given to the researches into the part played by minute organisms in the production of disease. Although no entirely new discovery has been made, the results obtained in previous years have been confirmed and extended. The most noteworthy investigations have been, as usual, those of M. PASTEUR, into the so-called cholera of fowls and the influence upon it of inoculation, but thanks to the Brown Institution, important researches in an allied field, by which the discoveries of PASTEUR have been in part anticipated, have been carried on by Dr. GREENFIELD, whose excellent lectures have been published in our columns. Mr. LISTER'S address at Cambridge and the discussion which followed, constituted an important means for the diffusion of knowledge on the subject. In Germany the life-history of bacteria and allied organisms has been carefully examined by KUHN and FOKKER, in relation to wounds by MAX WOLFF, and as a cause of disease of the lower animals by GRAWITZ and EBERTH; while the last named observer has also studied their relation to typhoid fever. Of investigations into problems of general pathology we may especially mention those on the subject of fatty embolism by WIENER, and the elaborate series of studies on amyloid degeneration which have been published by KYBER. The infective production of tuberculosis has been proved experimentally by TAPPEINER and BOLLINGER, and the theory has been boldly applied to the origin of tubercular disease in the human subject by COHNHEIM and CREIGHTON. The influence of the nervous system on nutrition formed a subject of discussion at the British Medical Association, and it elicited some interesting facts from HUTCHINSON and BROWN-SÉQUARD. The possibility of the regeneration of the spinal cord has been demonstrated by the experiments of EICHORST. Of the diseases of the spinal cord in man, some important contributions on the subject of myelitis have been made by LEYDEN, on lateral sclerosis by DEBOVE and GOMBAULT, and on the chemical composition of the bones in locomotor ataxy by REGNARD. Interesting investigations have also been made on the changes in the nervous system in certain skin diseases, especially in anæsthetic leprosy, by TSCHIRJEW; in herpes zoster, by CHANDELEUX; and in ichthyosis, by LELOIR. In pulmonary diseases we may note the remarkable discovery in Japan of a form of hæmoptysis of parasitic origin, by BAELZ; the investigation into the changes in the lung epithelium in pneumonia, by VERAGATH; and the termination of pneumonia in induration, by MARCHAND. Renal disease has also been a fruitful subject of research. The pathology of granular kidney has been studied by ROSENSTEIN, SAUNDBY, and LEWINSKY, the associated arterial changes by SOTNITCHEWSKY, and that of glomerular nephritis by LEECH.

Therapeutics.

Our pages have borne testimony to the fact that while in a few there may be an overweening interest in Pathology, the great body of the profession is still devoted to the cultivation of Therapeutics. Proofs too of the practical power of Medicines emerge even in the midst of pathological discussions. To take a recent illustration, Dr. DICKINSON in the recent debate on Rickets, speaking of the visceral disease incident to it, said, "It is amenable to treatment, though slowly, under cod-liver oil, iron"—we should have added quinine—"and hygienic measures; a spleen which touched the pelvis may gather itself up so as to be nearly out of reach of the fingers." Mr. TWEEDY published a series of cases of true diphtheritic ophthalmia successfully treated by local applications of quinine. It is idle to affect contempt for medicine when such statements can be made by the most careful observers.

Amongst the various subjects in practical Therapeutics which have engaged the attention of the profession has been the employment of intra-venous injections of milk. Mr. ARTHUR MELDON published three cases in our columns in addition to five others, in which the operation was of important use. The treatment of Ringworm with Carbolic Acid by Mr. ALDER SMITH, and with Salicylic Acid by Mr. COTTLE, was well expounded in our columns. The great question of the use of Salicylates in Acute Rheumatism was boldly raised by Dr. GREENHOW in the Clinical Society. His verdict was rather discouraging in tone, based on a considerable hospital experience. But even his admissions were to the effect that no other remedy has such power over the pyrexia and pains of rheumatism. His objections were to the toxic effects of these remedies, which, it is to be hoped, and which there is good reason to believe, will be found to be avertable or controllable. The enormous interest of the therapeutics of acute rheumatism is shown in our columns by a number and variety of communications, which we cannot attempt even to enumerate. One question which has come very much to the front in these discussions is the degree in which the heart structure is affected by acute rheumatism itself, apart from medicines having a depressing effect. Notwithstanding Dr. GREENHOW'S cases, the general opinion of the Society and of the profession is to the effect that these drugs are agents of great value and significance. The question of safe anæsthetics is still actively engaging attention, with an inclination in favour of ether as compared with chloroform, or a combination of the two. The treatment of puerperal fever has been fortunately the subject of discussion by Dr. MATTHEWS DUNCAN, whose lectures will be found in our columns. They give the weight of his great authority to the new method of treatment by antiseptic injections, ergot, quinine, iron, support, &c.; treatment which has long been used by many practitioners, but which has not been enunciated by authorities with quite sufficient distinctness. One great or rather slight ray of hope appeared in the course of the year in regard to a still more distressing disease—viz., cancer. Professor JOHN CLAY of Birmingham published in our columns a paper on the use of Chian turpentine in carcinoma uteri. As this subject is noticed in another part of our summary, we will not detain the reader with it here. The therapeutical use of Arsenic has been the subject of an interesting paper by Mr. MALCOLM MORRIS, delivered before the Medical Society of London. The disagreeable disease of bromidrosis is reported by Mr. WM. BRETT of New Cross, to have yielded to the local application of oleate of mercury. The delicate question of the use of alcohol in pneumonia has

been carefully touched by Dr. OCTAVIUS STURGES and by Surgeon JOHN HOYSTEAD, who had to treat the disease at Fort Dekka (four stations up the Khyber Line route to Cabul), and found alcohol helpful. Alcohol, as a general therapeutic agent, is being subjected everywhere to most suspicious treatment, by physicians and by boards of guardians alike. It has still friends who think it indispensable, either to preserve health or to cure disease, but the wisest physicians show themselves chary either of taking or recommending much of it. Dr. SYDNEY RINGER and Dr. WM. MURRELL have found glycerine curative of flatulence, acidity, and dyspepsia. This is a thing to be noted in an age when sugar is so critically regarded by physicians. A recovery from tetanus, treated by three pounds of chloroform, inhaled over about six days, was recorded in THE LANCET. Dr. HENRY KENNEDY reminds the profession of the use of rather large doses of extract of henbane in cancer. Not the least noticeable therapeutical communication of the year is that by Dr. RODERICK KENNEDY of Kingston, Canada, on the use of large doses of olive oil for softening and causing the easy expulsion of biliary calculi. Three cases were reported, in two of which 200 calculi followed the use of the oil.

Surgery.

In looking back over the past twelve months, it will be evident that there is no lack of zeal in the study of Surgery in both its scientific and practical aspects. In all directions we find able workers plodding on and gradually, though not continuously, advancing this branch of science and art. It has always been that special interest has centred round particular departments of Surgery, and we have accordingly to note discussion and invention following along the old familiar lines. The treatment of Wounds now, as ever, occupies a large share of the attention of surgeons, and while the past year has little or nothing of a novel character to add to our knowledge of this subject, and while surgeons are as little agreed as ever on the particular details to be observed or methods employed, they are more and more at one as to the great objects to be aimed at. It is no exaggeration to say that all surgeons now claim to practise Antiseptic Surgery, though the contest is as hot as ever over the best method of carrying out this endeavour. Listerism, which is becoming daily more widely known, is, however, in some danger of being prejudiced by the indiscretion of many of its disciples, whose zeal is not tempered by knowledge. How else can we speak of descriptions of wounds healing without suppuration *because* they were dressed with Lister's gauze under a spray of carbolic lotion? Such ignorance or folly must injure a system, and will neutralise the good effect of the adhesion to it of many wise men. Few things are more to be dreaded than that the notion should ever gain credence that Listerism or any other mode of dressing is a perfect and unfailing safeguard against all danger in operations and wounds, and that its use absolves the surgeon from the serious duty of weighing well the justification for his treatment, or from the exercise of appropriate skill in the performance of operations.

Side by side with, and as a necessary result of, the general practice of antiseptic surgery, Operative Surgery slowly extends its domain over regions hitherto considered beyond its pale. On the one hand, operations upon bones for the correction, especially of rickety deformities have become common—in the opinion of some of the older members of the profession too common. On the other hand, renal tumours and calculi have been successfully removed. Nephrotomy, the name by which the operation of cutting down upon the kidney from the loin is known, has been practised by BARKER, MAY, MORRIS, and PUZEY, whilst removal of the entire kidney—Nephrectomy—has been performed by SIMON, CZERNY, BARKER, THORNTON, and LUCAS. The feasibility of each of these operations is therefore established. Whether and when they are justifiable a larger experience is required to enable us to decide. A hope often kindled, and as often disappointed, has been again raised by Professor CLAY'S statements in support of Chian turpentine as a very valuable palliative, even if not an actual cure, for cancerous growths, particularly of the female generative organs. The success which was stated to have followed the administration of the drug was so marked that more than ordinary interest was excited by the announcement first made in our columns. We have published many communications on the subject, and without judging a question which is still to be fairly considered under discussion, we are not unwarranted in expressing the fear that the bright hopes at first held out have not been realised; that nothing in the nature of a cure for cancer is to be found in Chian turpentine; that it has failed even to relieve many examples of undoubted cancer of the uterus; and that, at any rate, some of the cases which have been benefited by its use are open to the fatal objection that they were not cancerous in nature, an error easily explained when the difficulty of diagnosis in the early stage of cancer is borne in mind. In the surgery of the Genito-urinary Organs the year just closing has seen BIGELOW'S operation for stone in the bladder more firmly established. Increased experience has proved the truth of the chief of BIGELOW'S maxims, though most English surgeons have preferred not to follow their American *confrère* in his entire contention. The evidence now before the profession appears conclusive that lithotrity with evacuation is far preferable to the older method of CIVIALE, although whether BIGELOW has extended the limits within which the crushing operation is advisable is at present uncertain, such an astute surgeon as CADGE being of opinion that he has not. Mr. CHEYNE has shown us that Gonorrhœa must be added to the list of septic inflammations, and has introduced a mode of treatment by antiseptic bougies specially directed against this feature; his recorded results are satisfactory. HARRISON has added yet another to the long list of means at our disposal for the Treatment of Gleet—Irrigation of the Urethra—and in suitable cases this treatment, properly carried out, is very serviceable. The Treatment of Stricture of the Urethra was one of the subjects specially discussed in the Surgical Section of the British Medical Association at its annual meeting at Cambridge, and it has formed the subject of several memoirs in France and America. Internal Urethrotomy would appear to be gaining in favour with most "specialists" in this department, but Dr. GRÉGORY of Bordeaux has published an able defence of the older operation of External Urethrotomy, and a serious indictment against its newer rival.

The space at our command forbids us to speak further of the progress made in the practice of Surgery during this year, or we might refer to BAKER'S method of excising the Tongue, POLLOCK'S operation for Piles, and many others. But even such a hurried survey as we have been able to take of the year's work, while not showing us any great discovery or acquisition which can be looked upon as a landmark, is yet sufficient to assure us that Surgery is being actively pursued both as a science and an art, and is steadily advancing along the path by which its value to mankind will be enhanced.

The Royal College of Physicians.

The Royal College of Physicians has not, as usual, supplied much material for history. In accordance with a custom of which we took an opportunity of disapproving, it has re-elected its President, Dr. BENNETT, for the fifth time. The College in this custom pays a poor compliment to its Fellows, by seeming to think that they include so few fit for the chair. That Dr. BENNETT has served the College well in no way detracts from the force of our objection to a bad custom. The College showed itself alive to the movements of current opinion in the matter of Examinations. In the early part of the year, at a meeting of the Fellows, a new set of bye-laws for the College licence was adopted. The Royal College of Physicians deserves the credit of being the first of the English corporations to institute a thorough system of examinations, for the Apothecaries' Hall does not examine in Surgery, and the College of Surgeons has only just begun to appreciate that Midwifery and Toxicology, not to mention Chemistry, Physics, and Botany, are subjects of importance to the general practitioner. We understand that the Council is considering the expediency of instituting examinations in these subjects, but at present they are not included in the examinations for either the Membership or the Fellowship. The examination for the licence of the College of Physicians is divided into three parts: the first comprising Chemistry and Chemical Physics, Materia Medica and Medical Botany, and Osteology; the second, Anatomy and Physiology; and the third, Medicine, Surgery, Midwifery, and Toxicology. Students who have passed in many of these subjects are exempted from re-examination, and the effect of such a liberal scheme has been most marked. At the last examination nearly fifty students were examined in the first series of subjects, and nearly thirty in the third series. As most English students pass in Anatomy and Physiology at the Primary Examination for the membership of the College of Surgeons, the numbers for the second part are necessarily always small, but even here we understand there was also a decided increase. The profession and the public should understand that the new examination for the licence is as practical and as thorough as most university examinations, and that the Licence of the Royal College of Physicians necessitates as complete an education as that which is enforced for most of our M.B. degrees. The Gulstonian Lectures were delivered by Dr. GOWERS, the subject being Epilepsy; the Lumleian, on the Digestive Ferments, by Dr. W. ROBERTS, of Manchester; and the Croonian, on Some Points in the Pathology and Treatment of Typhoid Fever, by Dr. W. CAYLEY.

The Royal College of Surgeons.

The Council of the Royal College of Surgeons of England has during the past year manifested unusual zeal in the cause of medical education. It has resolved to take steps, either alone or in conjunction with other bodies, to institute a complete examination to be passed by all candidates for the diploma of Member or Fellow, without waiting for the fulfilment of the Conjoint Scheme. It has also recently agreed to the principle of relegating the preliminary examination to the general educational and examining bodies. With a view to diminishing the number of rejections, and to obviate a pecuniary loss for re-examining rejected candidates, the Council has resolved that all candidates for re-examination shall pay a fee sufficient to cover the costs of examination. At the annual election of members of the Council last July there were four vacancies, caused by the death of Mr. HENRY HANCOCK, the retirement by rotation of Messrs. BUSK and CURLING, and the resignation of Mr. JOHN SIMON. Mr. CADGE, Mr. BRYANT, Mr. LISTER, and Mr. THOMAS SMITH were elected to the vacancies. In January Mr. HULKE was elected a member of the Court of Examiners in the place of Mr. CURLING; in March Mr. BELLAMY and Mr. MCCARTHY were appointed to succeed Mr. WOOD and Mr. HULKE as members of the Board of Examiners, and in April Mr. COOPER FORSTER was re-elected a member of the Court of Examiners. In July Mr. ERICHSEN was elected president, and the previous professors and lecturers of the College were re-elected, with the exception of Mr. LOWNE, who had resigned the Arris and Gale lectureship, and was succeeded by Mr. GERALD YEO. Mr. LE GROS CLARK having retired from the Court of Examiners, Mr. JONATHAN HUTCHINSON was appointed in his place in October. On the 9th inst., the Board of Examiners was appointed, all the previous members being re-elected, except Mr. HEATH and Mr. POWER, whose term of office had expired. Mr. LANGTON and Mr. GERALD YEO were appointed in their places.

Army and Navy Medical Departments.

The year has been one of comparative quiet in the Army Medical Department. In February the promotion of fifty surgeons-major to the rank of brigade-surgeon took place in accordance with the provisions of the Royal Warrant of November, 1879. At the two competitive examinations for admissions into the service there was an adequate supply of candidates, and, as we learn from Netley, of a very good stamp. This justifies the inference that the provisions of last year's Warrant have been deemed satisfactory by the profession. The successful manner in which the work of the Department has been done with the force in Afghanistan furnishes very strong evidence in favour of the present system of organisation, about which so many doubts were expressed at the period of its adoption. It is gratifying to find that Sir FREDERICK ROBERTS does not, like some other Generals, ignore the officers of the Medical Department, but has brought to the notice of the Government the zealous and efficient manner in which they have performed their arduous duties. At the close of the year a Royal Warrant was published regulating the medical department of the Household Brigade and removing certain grievances of which they had just grounds to complain. If it be considered necessary to

keep them distinct from the Army Medical Department, and to conduct the service of the Guards on a different principle, it is but just that when benefits are conferred on the other medical officers those of the Household Brigade should not be overlooked. But while the year has passed quietly for the Army Medical Department it has been very different with the Indian Medical Service. In the beginning of the year a General Order was published by the Indian Government abolishing the dual administrative medical staff, and giving to the army medical officers a large proportion of the remaining administrative appointments, without apparently granting any compensation to the Indian service for those of which they were deprived—a proceeding which naturally created a great amount of indignation, alarm, and discontent. After the lapse of some weeks a second General Order was published, regulating the civil appointments held by medical officers and placing the service on such a footing as, in our opinion, more than compensated for the loss inflicted on it by the first General Order. The want of tact shown by the Government in the promulgation of the scheme in two distinct portions instead of one well devised plan was much to be regretted. The discontent excited by these new regulations caused the attention of the officers to be turned to various other points connected with the service which appeared to press unfairly upon them, and these were brought under the notice of the authorities in India and at home. The result of these representations has been that a Royal Warrant has just been promulgated removing certain differences which existed in the grades, relative rank, and regulations respecting promotion and retirement which existed between the British and Indian Medical Services, and the Marquis of RIPON has directed an inquiry to be made into the other grievances with a view to their amelioration.

Of the Naval Service we regret that we have little to say. In the beginning of the year Dr. REID was promoted to be Director-General in succession to Sir A. ARMSTRONG—an appointment which seemed to give much satisfaction to the Department. As yet no steps have been taken to remove the grievances of the medical officers or to hold out any inducement to young men to join the service. We are informed that the subject will be taken into consideration when the estimates are being prepared! Unless considerable modifications are introduced the Lords of the Admiralty may rest assured that the supply of candidates will continue, as it has been during the past year, greatly under the requirements of the service both in number and in quality.

Mirror of Hospital Practice.

In the "Mirror of Hospital Practice" we have endeavoured, as heretofore, to supply trustworthy records of cases illustrating the state and progress of medicine and surgery as practised in the principal hospitals and dispensaries throughout the United Kingdom and the Colonies. Every department of practice has been represented. During the year the notes of between two and three hundred carefully observed cases have been published. All of these possess clinical or pathological interest; some are rare, and a few unique. No pains have been spared to make the records complete, so that their value is more or less permanent. In this attempt we have once more to acknowledge with pleasure the aid afforded by the various physicians, house-physicians, surgeons, house-surgeons, clerks, and dressers, who have supplied us with notes and other materials. Without this co-operation our task would have been more difficult, and must have been more imperfectly performed. From among reports already selected it is almost invidious to pick out cases for special notice. We may, however, mention the following as among some of the more curious or interesting of the records:—Dr. FUSSELL'S case of large sarcoma of the left ilium; sarcomatous thrombosis of the left common and external iliac veins; sarcomatous emboli in the right ventricle of the heart and the right lung, and secondary deposit in the lung, from the Sussex County Hospital; Mr. MORRANT BAKER'S five cases of localised scleroderma, from St. Bartholomew's; a case of profuse intracranial hæmorrhage, with intense headache, vomiting, delirium, and glycosuria, but without hemiplegia, and terminating in coma and death, from the Manchester Royal Infirmary; Dr. SINCLAIR'S three cases illustrating the difficulties of recognising internal cancer, from the Dundee Royal Infirmary; Dr. FERRIER'S case of left-handed epileptic hemiplegia and aphasia, from King's College Hospital; and Mr. WHEELHOUSE'S case of aphasia following an injury to the left side of the head, from the General Infirmary, Leeds; Professor SPENCE'S three cases of nerve-stretching, from the Edinburgh Royal Infirmary; Mr. BRYANT'S series of surgical cases illustrating wound treatment, from Guy's; Mr. ROSE'S successful operation for ununited fracture of the olecranon, by opening the joint and wiring the fragment to the ulna, from King's College Hospital; Mr. POLLOCK'S case of successful reduction, seventy-two days after the injury, of a dislocation of the femur into the sciatic notch, in a man seventy-two years old, from St. George's Hospital; Mr. BELLAMY'S case of amputation at the shoulder-joint for diffuse traumatic aneurism of the axillary artery, caused by rupture of the artery some weeks previously, during reduction of a dislocation of the humerus, from Charing-cross Hospital; Mr. ROUSE'S successful removal of epithelioma of the rectum without damaging the sphincter ani, from St. George's; Mr. NEWNHAM'S case of dislocation of the foot backwards, from South Staffordshire Hospital; and, lastly, Mr. CHRISTOPHER HEATH'S remarkable case of removal of a large epithelioma of the lower jaw and floor of the mouth, in which, two years after the operation, there was no recurrence of the disease, and the patient was in good health.

Medical Societies.

In the various Medical Societies there have been many matters of interest brought forward, some fresh facts and observations added to the slowly-accumulating store, new methods of treatment described, old methods reconsidered, and subjected anew to criticism—all marking the slow but onward progress of our art. Before briefly surveying the work of the year in these bodies, the formation of a new Society deserves especial mention. On June 23rd a meeting was held to inaugurate an Ophthalmological Society of the United Kingdom. The extension of the scientific study of ophthalmology and its bearings on general medicine and surgery justified this step, and the large list of supporters confirmed the idea that its formation supplied a real need. Mr. BOWMAN, F.R.S., was chosen president, and already

two successful meetings have been held, when, in addition to the exhibition and description of cases, papers have been read by Mr. HUTCHINSON, Mr. CRITCHETT, and Dr. HUGHLINGS JACKSON—names representative of the various branches of the profession that have co-operated to the formation of the Society.—At the Royal Medical and Chirurgical Society several papers on surgical subjects have been read. Early in the year Mr. HEATH contributed one on the Treatment of Subclavian Aneurism by the introduction of Needles into the Sac; and more recently Mr. H. MORRIS described a case of External Carotid Aneurism, in which the sac was opened, and the vessel secured on its distal side, after a ligature of the common carotid had failed. Mr. BARKER discussed the subject of Nephrectomy, and Mr. BRODHURST that of the Treatment of Genu Valgum, in which he strongly deprecated osteotomy. On two occasions there have been discussions upon the value of Antiseptics in Ovariotomy, the practice being attacked by the authors of the papers, Mr. LAWSON TAIT and Dr. BANTOCK, and as strenuously supported by Mr. SPENCER WELLS and Mr. KNOWSLEY THORNTON. Amongst other papers bearing on surgery may be quoted one on Syphilitic Stenosis of the Pharynx by Dr. GILBART SMITH and Mr. WALSHAM, and one on Basic Cavity of the Lung treated by Incision by Dr. D. POWELL and Mr. LYELL. The more purely scientific communications include a careful study of the comparative value of methods of Artificial Respiration in the New Born by Dr. CHAMPNEYS, a research upon Spirillum Fever by Dr. VANDYKE CARTER, an account of the remarkable lack of Amœboid Movements shown by the White Corpuscles in Leuchæmia by Dr. CAVAFY, and a contribution to Teratology by Messrs. WILLETT and WALSHAM, who described minutely a remarkable case of Skeletal Malformation.—At the Pathological Society, in addition to the plan introduced last year of exhibiting specimens without oral communication, the Council devised further means for facilitating the work of the Society by issuing a lengthy catalogue of *desiderata* as a guide to members in their selection of material. It is obviously impossible to particularise the many facts adduced before this Society; suffice it to note the discussion upon the Osseous and Articular Changes in Locomotor Ataxy, opened by Dr. BUZZARD, and the debate, to which three meetings have been devoted, on the subject of Rickets. This debate was opened by Dr. HILTON FAGGE, in a lucid survey of the present state of knowledge upon the subject; followed by a study of the subject of Cranio-tabes by Drs. BARLOW and LEES, who brought forward strong evidence in favour of syphilitic lesion being a chief factor in its production. Sir W. JENNER spoke on the second evening of the debate, and it was evident that but little has been added to the pathology of Rickets since his well-known lectures appeared twenty years ago.—The Clinical Society is always productive of much interesting matter. A report of a committee upon the effects of the Long-continued Use of Chloral was presented early in the year, but its conclusions were not as definite as might have been wished. The subject of Keloid was also reported on by a committee of this Society. The Treatment of Rheumatic Fever by Salicin and Salicylate of Soda was discussed in two papers by the President, Dr. GREENHOW, whose conclusions as to the efficacy of these drugs in a large number of cases proved to be somewhat discouraging. Dr. GOODHART contributed a case of Rheumatic Fever, which terminated suddenly from cardiac failure whilst under treatment by the salicylate. A debate on Bone-setting occupied the attention of this scientific body on one evening, the subject being introduced by Mr. MARSH. Two novel and successful operative procedures have been brought under notice at this Society—the one, styled "Nephro-lithotomy," or the extraction of a calculus from the kidney before secondary changes have been set up in the organ, was brought forward by Mr. H. MORRIS; the other, an Extraction of a Villous Growth from the Bladder, by Mr. DAVIES-COLLEY. Both the operations were successful, and met with deserved commendation. The operation of Nerve-suture was illustrated in a case by Mr. HULKE, and that of Nerve-stretching in a case by Mr. GODLEE and Dr. STURGE—the facial nerve being stretched for the relief of facial spasm—with marked success. Dr. LEES and Mr. BELLAMY reported a case of Trephining for Traumatic Epilepsy; Dr. GOWERS discussed the subject of Locomotor Ataxy, especially as regards its hereditary transmission and its relation to syphilis; and two remarkable cases illustrating the subject of Aphasia were contributed by Dr. F. TAYLOR and Dr. HABERSHON, one being a case of destruction of Broca's convolution and right hemiplegia without aphasia, the other of left hemiplegia with aphasia. Both the patients were left-handed.—At the Medical Society the Lettsomian Lectures were delivered by Mr. TEEVAN upon the Treatment of Stricture, Enlarged Prostate, and Stone in the Bladder; the annual Oration by Dr. BROADBENT on the Pulse. A Committee of the Society reported upon Arsenical Poisoning by Wall-papers and Fabrics, and further inquiry was resolved upon. Amongst the prominent communications may be mentioned those by Dr. H. JACKSON on Cerebellar Tumour and on Recovery from Symptoms of Organic Brain Disease; a paper by Dr. ORD on the Treatment of Thoracic Aneurism by Galvano-puncture, and by Dr. BROADBENT on Pleural Effusion. One evening was devoted to a debate on the Lunacy Laws, and attracted considerable attention.—The lecturer this year at the Harveian Society was Dr. J. E. POLLOCK, who discussed the subject of Phthisis.—At the Obstetrical Society the most notable papers discussed were one by Mr. LAWSON TAIT on the Rotation of Ovarian Tumours; one by Mr. KNOWSLEY THORNTON on the Removal of Fibroids by Laparotomy; and cases of Extra-uterine Fœtation by Drs. BRAXTON HICKS, FOULCHER, and CARTER. Dr. GRAILY HEWITT contributed an analysis of a series of cases of Uterine Distortions and Displacements, and Dr. POOLE a case of Congenital Dislocation of both Hips.—At the Epidemiological Society a paper by Dr. JAMES EWART on Enteric Fever in India gave rise to a lengthy discussion. Indian diseases were also illustrated in papers by Dr. CHEVERS on Relapsing Fever, and by Dr. FRANCIS on the Plague.—There have appeared also from time to time in our columns reports of the Medical Officers of Health Society, and of the Association of Surgeons Practising Dentistry. It will be seen from the foregoing summary how varied have been the subjects chiefly dealt with in the past year, and although indicating only those which seem to be the more important, it must be borne in mind that many other communications have been

read of almost equal interest, the whole forming strong evidence of the flourishing condition, as well as the popularity, of the Medical Societies.

The Medical Council.

The Medical Council met in July and displayed boldly all the faults of its constitution and system of procedure. For probably the twelfth time it traversed the whole field of preliminary education, making Sir WILLIAM GULL exclaim, "We fight our battles three times over, and never come to any result: we shall go on for ever,—yes, for ever, till time shall be no more." This discussion lasted nearly a week, and embraced nearly every question in preliminary education, from the merits of Greek to those of Dutch. Nearly at the close of the meeting, Mr. SIMON carried a resolution recommending that an examination be imposed on students in the rudiments of natural science—physical, chemical, and biological. This examination is to be placed after the General Preliminary Examination, and either before beginning the medical curriculum, or at the end of the first year. It will not be for want of recommendations and examinations if the medical student of the future is not perfect. Mr. SIMON sought to get from the Council an expression of opinion in favour of urging on the Government the desirableness of deciding their course with regard to medical legislation, with the view of terminating "a period of indecision and unsettlement;" his motion was seconded by Dr. QUAIN, but it was lost. The Council evidently believed that the change of Ministry was somehow in their favour, and that if they can prolong "the period of unsettlement" the question will be abandoned in their favour. It is pitiable to see a public body so criticised and so little respected, and yet so willing to live on in helpless inefficiency. We need not notice further a meeting lasting nine days under circumstances of "unsettlement" which would have justified a formal meeting of a few hours.

Medical Associations.

We cannot bestow more than a passing notice on the work of the Medical Associations. The British Medical Association met at Cambridge, under exceptionally favourable circumstances. A very grateful feature of the meeting was the presence of the venerable Professor GROSS of Philadelphia, setting younger men an example of vigorous interest in science at an age long before which they are apt to become indifferent and selfish. Honorary degrees were conferred on those, for the most part, who had similar honours conferred by other Universities, but with a singular want of originality and boldness. The meeting was signalised by a large concourse of distinguished members and visitors, by several addresses of exceptional interest, including the Presidential Address by Dr. HUMPHRY; the address on Medicine, by Dr. BRADBURY; on Surgery, by Mr. TIMOTHY HOLMES; the address in Physiology, by Dr. MICHAEL FOSTER; in Psychology, by Dr. J. CRICHTON BROWNE, and that by Dr. W. S. PLAYFAIR at the opening of the Obstetric Section. An address in the Pathology Section by Sir JAMES PAGET, entitled Elemental Pathology, emptied all the other Sections, and suspended other business. This Section was also favoured by an able summary from Mr. LISTER of the Investigations of KOCH on Septicæmia and Gangrene, and of the discovery of the nature of the so-called Fowl Cholera by M. TOUSSAINT.

Guy's Hospital.

There are a few special questions or events in every year without notice of which any summary would be incomplete. In the present year we have to mention with regret a disturbance of the harmony of one of our large endowed Metropolitan Hospitals, which threatens even yet to mar its historical usefulness and fame, and has already produced the resignation of its two senior medical officers, Dr. HABERSHON and Mr. COOPER FORSTER. This discord began in an attempt on the part of the Treasurer and Governors to make fundamental changes in the nursing system of the hospital without previous consultation with the medical officers, who are as vitally interested in the efficiency and subordination of nurses and nursing as in the quality of the quinine, or of the chloroform which they prescribe. As if to accentuate the scandal of a nursing system acting independently of the medical staff, two cases came to light which greatly shocked public feeling. One, that of a patient with chronic phthisis, who was subjected to a cold bath for an hour by one of the nurses, partly apparently with a penal view, and with a slight notion that it would do no harm therapeutically. Very shortly after symptoms of acute mischief in the head appeared, and soon proved fatal. The nurse was found guilty of manslaughter. In a later case a man was brought to the hospital after a fall, with a slight scalp wound. He was seen and the wound dressed *by a nurse* slightly. The next day he was brought back to the hospital and found to have fracture of the skull, of which he soon died. The controversy which took place between the Treasurer and the Governors, upholding the new nursing system on the one hand, and the medical men on the other, has occupied most of the year. On the part of the Treasurer and Governors it has been disrespectful and highly unmindful of what was due to the medical faculty of a hospital which has been made famous at home and abroad by its medical faculty. On the part of the medical staff there has been a want of decision, strength, and, we had almost said, self-respect; but it would be more proper to say respect for the profession they represent. Although, however, the senior medical officers have resigned, the public scandal remains of a great hospital so badly administered financially that it is deeply in debt, that nearly a hundred beds have had to be closed, and that by a system of self election on the part of the Governors medical men have gradually been ousted from the Board of Management, and that the admission of two is now conceded as a sop to public and professional indignation. Clearly, we have not got to the end of the crisis at Guy's, which discredits the year 1880. But good will yet come out of it.

Medical Politics.

Progress in medical legislation was abruptly, but we hope only temporarily, checked by the unexpected dissolution of Parliament. The Select Committee on Medical Bills had commenced its work and took the evidence of Professors STRUTHERS and GAIRDNER, setting forth, as Professor TURNER had done before, the important work being done by the Scottish universities, and their not unreasonable anxiety that it should not be unduly interfered with by legislation, which the Profession feels to be so necessary for reducing the competition and the inequality in Medical

Licensing Boards. The fall of the old Parliament had at least this disadvantage, that it deprived medical men of the services in Parliament of Dr. LUSH, Mr. MILLS, and others who had heartily and ably helped the cause of Medical Reform. The new Parliament happily includes new medical members, who will, we believe, prove worthy successors of WAKLEY, BRADY, CORRIGAN, LUSH, and others. The new Government had not been long in office before it was interrogated on the subject of its intentions in regard to amendments of the Medical Acts. The tone of the answer of the Lord President and the Vice-president was regarded as somewhat discouraging. But there is reason to believe that Mr. MUNDELLA at least was misunderstood, and that nothing more is wanted than an unmistakable expression of the feeling of the profession to induce the Government to complete the work begun by two preceding Governments. The state of Ireland involved some questions of medical interest, but, thanks to the progress of time and of Government, we were spared a repetition of the diseases of famine on anything like the scale of the historical fevers of 1845. Various other questions of medical interest were touched but not disposed of, some of which are noticed elsewhere, the most important of these being the present shape of our Vaccination Laws.

Medico-Legal Cases.

The medico-legal history of the past year is marked by several cases of more than ordinary interest. In February LEWIS J. PAINE was convicted of manslaughter for encouraging a wretched woman with whom he lived to consume inordinate quantities of alcoholic drinks and of thus compassing her death. He was sentenced to penal servitude for life. The case is remarkable because the lethal agent was a common article of diet which the prisoner consumed in quantities nearly equal to those with which he plied his victim. The case of HOWELL *v.* WEST, in which the parent of a boy at the Epsom College brought an action against the head-master and medical attendant of the college to recover expenses in connexion with his son's illness and death, which were alleged to have been due to the carelessness of those who had the charge of him, ended in a verdict for the college authorities. The celebrated case of BAGOT *v.* BAGOT, which had been pending for two years, ended in a compromise. It will be remembered that in consequence of BAGOT suffering from locomotor ataxy in a marked form, it was alleged that he could not be the father of his wife's child, and that therefore the will which he had made, almost disinheriting the child in question, was right and proper. The inquiry at the Cork Fever Hospital into the charges preferred against Dr. MACNAUGHTON JONES of performing "a dangerous operation" (the hypodermic injection of pilocarpin), and thereby causing the death of a patient, happily showed those charges to be altogether groundless and vexatious, but the case serves to show the annoyances to which a conscientious physician may be subjected. The trial of PLEASANCE LOUISA INGLE, a nurse of Guy's Hospital, for the manslaughter of a patientt and the many unpleasant facts connected therewith, is too fresh in the minds of our readers to need even a word. Three of the cases mentioned above showed that those who practise medicine and surgery must be prepared to justify their acts. In the cases of HOWELL *v.* WEST and REGINA *v.* INGLE members of the profession were brought into antagonism with each other in a manner which was greatly to be regretted, and will cause the year 1880 to dwell unpleasantly in the memory.

Sanitary Legislation and Administration.

With regard to public-health matters, two events occurred during the year which peculiarly mark it. We refer first, to the acceptance by the Local Government Board of a duty of cultivating animal vaccine lymph for the public use; and, second, to the introduction into Parliament, by the President of the same Board, of a Bill for relieving persons objecting to vaccination of the discomfort arising from recurrent penalties under the existing vaccination law. The year opened with the professional discussion as to animal vaccination, its merits and demerits, in full swing. In this discussion the profession had the advantage of Dr. WARLOMONT'S assistance, who brought to their aid, in coming to a sound conclusion, the results of his unique experience in Belgium. Dr. CAMERON, M.P., moreover, who had been chiefly influential, by his introduction of the subject into the House of Commons and his ventilation of it in the public press, in bringing the matter to a crisis, helped. The Local Government Board also, recognising the importance of the discussion, delegated Dr. BALLARD to represent in it the Central Government aspects of the question. At first there was some danger of the discussion lapsing into side issues, but eventually it became evident that there was no substantial differences of opinion among all the parties taking part as to the advantages to be derived from the introduction of animal vaccine into the national system of lymph issue. It was impossible for the President of the Local Government Board to resist the weighty professional opinion brought to bear upon him, and Dr. CAMERON had the gratification in the course of the last session of Parliament of eliciting a promise from Mr. DODSON that his department would make arrangements for the issue of animal lymph from the National Vaccine Establishment. Whatever these arrangements were to be, they do not appear to have been yet completed; but Dr. CAMERON will soon have the opportunity of ascertaining what stops the way. After showing this tendency to advance in his department, Mr. DODSON curiously enough revived the Vaccination Amendment Bill which had been introduced into Parliament several years ago by Mr. FORSTER, and which embodied certain conclusions of the last Parliamentary Committee on Vaccination. The Bill had for its object to relieve objectors to vaccination from repeated penalties for neglecting vaccination, and this by exempting from further penalty persons who had once paid the full penalty that can be inflicted under the law, or who had been fined twice in a less sum. It provided, in short, a cheap and easy mode of freeing the objector from the operation of the law, the child remaining unvaccinated. It is not often that the profession as a body has shown such community of interest and manifested so earnest a desire to save the public from what it believed to be an error in policy, as in this case. Through its recognised corporations and associations, and in conjunction with representatives of almost every branch of the scientific world, it appealed so forcibly and with such cogent reasons to Mr. DODSON that the Bill was withdrawn. It is

greatly to be wished that the energetic action displayed by the profession in this case could be more frequently observed in matters more directly affecting its own interests.

The attention of the profession and of the public has been much and increasingly occupied during the year with the consideration of infectious diseases and the means for their limitation. The subject of the influence of schools in disseminating those diseases has particularly claimed attention. It is to be feared that the compulsory clauses of the Education Act while securing the object primarily aimed at, have indirectly and unexpectedly tended to a greater development of certain infectious diseases. This was probably a necessary consequence of the more certain gathering together of children in larger numbers in schools; but we have little fear that as this matter becomes clearer, medical officers of health will see their way in practice to counteract the evil, and that legislature will support their efforts in this direction. In Local Acts powers are being taken by Sanitary Authorities for the closure of schools in view of certain extending epidemics, and we have little doubt that this local legislation indicates the line in which general legislation, in this respect, will ultimately take on the subject. In connexion with this subject it may be mentioned that five corporations—to wit, Huddersfield, Lancaster, Oldham, Preston, and Stafford—obtained Local Acts including provisions for the more effectual dealing within their boroughs with infectious diseases. The provisions are, as a rule, similar to those granted to other corporations in preceding sessions of Parliament, providing especially for the notification of infectious diseases, but there were diversities which still further show that it is high time this form of legislation in regard to these diseases came to an end. It is a form which must clearly add, and is, indeed, adding, to the already sufficiently complicated character of our sanitary law. Moreover, this sort of legislation granted indiscriminately to corporations, whether they have means for giving effect to it or not, may end in bringing sanitary legislation on the subject into discredit. For it is unlikely that local authorities who have failed to exercise the comparatively slight powers in respect to infectious diseases they possess under the Public Health Act, 1875, will carry into effect the extensive powers they obtain under a Local Act.

No general legislation directly of a sanitary character took place during the last session of Parliament. The administration of the Local Government Board, notwithstanding a change of Presidency consequent upon the change of Government, calls for no particular remark on the public health side other than we have already made in respect to animal vaccination and the Vaccination Amendment Bill brought forward by Mr. DODSON; and on the poor-law side nothing occurred as affecting the medical aspects of the poor-law which requires special notice. It is remarkable, having regard to the too general defective sanitary and medical administration of workhouses, how the Board continues to escape from an endless series of public scandals in this matter. The resignation of Dr. E. C. SEATON as Medical Officer of the Local Government Board, quickly followed by his lamented death, took place early in the year. Dr. BUCHANAN, the Assistant Medical Officer under Dr. SEATON, was appointed Medical Officer to the Board in Dr. SEATON'S place, and Mr. NETTEN RADCLIFFE succeeded Dr. BUCHANAN as Assistant Medical Officer.

Two questions concerning the public health aspects of disease occupied chief attention in the course of the year. The first question related to a discovery by Mr. W. H. POWER, of the Medical Department of the Local Government Board, that an outbreak of simulated enteric fever on board a school-ship in reality was a form of parasitism, at first suspected to be trichinosis, or like trichinosis in character, but afterwards shown to be of an unknown nature. This discovery has opened up a new field of research in parasitism, and we wait the results of its further cultivation with great interest. The second question related to an outbreak of fatal anthracoid disease among persons engaged in sorting wool in Bradford and Yorkshire. An account of this outbreak, written at the time, has been given in THE LANCET in certain remarkable papers from the pen of Dr. BELL, of Bradford (to whom the merit principally attaches of having worked out the real nature of the affection known locally as "woolsorters' disease"), and we look for a further history of the outbreak from the pen of Mr. JOHN SPEAR, of the Medical Department of the Local Government Board, who investigated the matter for that department of the Government. The pathological inquiry regarding the outbreak was carried out by Professor GREENFIELD, of the Brown Institution, and we have quite recently had the gratification of hearing the results, and of their relation to the whole question of Anthrax from his lips in the lectures he has delivered at the University of London, which ended only this week, and which are now appearing in the columns of THE LANCET. It would be difficult to exaggerate the interest and suggestiveness of these lectures, not only with reference to the pathology of anthrax, but also with reference to several questions of epidemiology of the profoundest moment. This is not the place to comment on the results of Dr. GREENFIELD'S observations, and the observations of others in the particular teachings of the pathological laboratory as to anthrax. Let it suffice to say that for the first time there was presented to the eye and ear in the course of his lectures the whole probable history of the origin, development, increase, decrease, and cessation of a virulent epidemic disease peculiar to animals, but apt to be propagated to man; and a clue was obtained to a line of research touching virulent epidemic diseases generally of the greatest promise. Moreover, it was clearly shown by Dr. GREENFIELD that questions of etiology were not alone concerned in his observations, but that these tended to confirm the researches of other observers that there was being developed side by side with our knowledge of the intimate nature of certain epizootic diseases a knowledge of a prophylaxis similar in character to that which vaccinia exercises upon small-pox. In other words, that it has become possible in the laboratory to cultivate the virulent poisons of the diseases referred to, so that they may by inoculation become protective against their own virulence.

The report of the medical department of the Local Government Board, published during the year, is especially noteworthy for containing the last and concluding part of Dr. BALLARD'S report on "Effluvium Nuisances." It is a curious comment on the administration of the Local Government Board that this remarkable and unique work

has not been published in a separate form. It is distributed through three annual reports of the medical department, and has been published in these reports almost regardless of cost; yet no attempt has been made to bring the several parts together and make them readily accessible for the purpose for which they were intended. The Board has evidently spared no money to perfect the inquiry as far as practicable, but the inquiry being completed and the results invaluable, the Board is careful that the results shall be got at only with difficulty!

No international questions relating to disease obtained much prominence during the year, but the National Board of Health raised a question of what may be called (following Dr. BOWDITCH'S phrase) the Sanitary Organisation of Nations, which may bear fruit hereafter. Of metropolitan health-questions, difficulties accompanying the execution of the Artisans and Labourers' Dwellings Acts and the proposed purchase of the interests of the Water Companies by the Government had the chief place. The former difficulties are still under consideration, and may be a subject for legislation during the coming session of Parliament; the scheme for the purchase of the Water Companies' interests fell through, but this question is pretty sure to come to the front again.

Almost as we write Dr. ALFRED CARPENTER and others are encouraging hopes (let us trust not tantalising) that the amelioration of that abomination of abominations, a London fog, is a possibility. London fog was a most deadly element in the history of 1880. The deaths from diseases of the respiratory organs, registered in London in the week ending Feb. 7th, were 1557, being in excess of the weekly average by no less than 1125! We have to thank Dr. ARTHUR MITCHELL of Edinburgh for the prominent attention which this subject has received of late. In a paper of his which appeared in the course of the year on the influence of the protracted fogs of the winter of 1878-79 on the mortality of the metropolis, he showed how disastrously they had aggravated the mortality from respiratory diseases. This paper excited great notice, and proved that much more serious inconveniences than discomfort and dirt were accompaniments of a London fog, and is causing serious efforts to be made with a view of securing the abatement of this grave nuisance.

The Epidemiological Society, under the Presidency of Sir JOSEPH FAYRER, has displayed great activity. Of the numerous important subjects it has had under consideration we may signalise especially the question of "enteric fever" and "fevers" of tropical climates. Papers were read on these fevers by Surgeon-General GORDON, Surgeon-Major DON, and Deputy Surgeon-General EWART, and a special evening was devoted to their discussion. The interest of the discussion rested mainly in the apparent divergence of views on the subject of enteric fever entertained by medical men of wide experience in India and the tropics and medical men of home experience. But it appeared that even a wider divergence existed among men of large Indian and tropical experience, and among certain of them than among the former, and men of home experience. The discussion inevitably suggested that the divergence signified wide differences in the methods of investigation pursued, and also in the phraseology made use of.

Commissions.

Early in the spring we appointed a Commission to inquire into the working of the new Sick Infirmaries attached to the Metropolitan Workhouses. The result of this inquiry showed that considerable care and attention had been bestowed on the arrangement and construction of these institutions; but our Commissioners pointed out that the medical and nursing staff fell very short of the requirements for efficiently dealing with cases of acute sickness arising among the sick poor. Our Commissioners expressed an opinion that the medical staff should be strengthened by the appointment of clinical assistants, and thus, by relieving the medical superintendent of much unnecessary work, permit him to give more attention to serious and urgent cases. They also recommended that the nursing staff should be largely increased. One point particularly was brought into prominent notice in the course of this inquiry, and that was, how important a factor sickness was among the working classes in the production of pauperism. Our Commissioners demonstrated the proposition that we have so frequently enunciated in these columns, that the sick poor will not, till the last extremity, submit to be pauperised by admission to these infirmaries so long as they can maintain the struggle outside. In consequence of this reluctance, much valuable time is lost in the treatment of disease in its earlier stages, and the case has often assumed a chronic and hopeless form before it is admitted into the sick asylum, where it remains a burden upon the rates for months, or even years, whereas if it had come under observation at an earlier period the catastrophe might have been obviated. A classification and separation of the *sick poor* from the *sick pauper* in these institutions is urgently called for. Recognising the national interest now attached to athletic pastimes, we have during the present year directed attention to some points of interest in these pursuits. Hitherto our remarks have been limited to suitability of various kinds of exercise for individuals under different conditions of life. In the forthcoming articles the various systems of training will be contrasted, and we shall endeavour to enunciate a system that shall fulfil all strictly physiological requirements, with special reference to individual idiosyncrasies. In our introductory article on the subject of Athletics generally we pointed out the revolution the sliding seat was likely to make in the art of rowing, and predicted that increased length of slide, with a slower stroke, would enable the oarsman to bring increased muscular effect to bear on his work, and so increase his pace. This statement has been borne out by the result of the recent race for the championship of the world between HANLAN and TRICKETT, the former, with an increased sliding range of seat and with a considerably slower rate of stroke, easily defeating his opponent, who was the taller and more powerful man. Feeling strongly that the use of Wines as therapeutic agents, and as stimulants and cordials by the convalescent, does not rest on precise principles, we have appointed a Commission to conduct a new series of medical and chemical investigations. Some of the reports of this Commission have appeared, and others are in preparation. We have also collected materials for a special report on Schools, which are now under consideration, and will shortly form the subject of special articles in THE LANCET.

Obituary.

It is never a satisfactory part of a summary to recall the losses of the year. This year is no exception, for it has taken away many whose labours have made momentous additions to medical knowledge, and many more whose medical practice entered into the local history of their respective neighbourhoods. We scarcely know how to select from names so representative. But a few will suffice to show how great the losses are. HENRY HANCOCK, J. A. LOCKHART CLARKE, EDWARD CATOR SEATON, DOMINIC CORRIGAN, ALFRED SWAINE TAYLOR, PAUL BROCA, FERDINAND R. v. HEBRA, ROBERT CEELY, WILLIAM BUDD, Deputy Inspector-General EDWARD GOODEVE Dr. ALFRED HUDSON, EDWARD CARR JACKSON, Dr. JOHN DEAKIN HEATON, J.P., Leeds, HENRY FRANCIS BURDETT of Birmingham, EDWARD AMPHLETT, M.A., M.B. Cantab., Deputy Inspector-General JOHN STIRLING, M.D., Surgeon-Major J. B. HANNAH, at Naini Tal, J. PEARSON IRVINE, M.D., EDWARD ISAAC SPARKS, M.B. Oxon., Surgeon-Major BRYDEN, of the Bengal Army, &c. Many practitioners have died ripe in years and honour, like Mr. LONG of Liverpool, or Mr. WM. JOY, of whom it was said that he practised fifty-five years at Northwold, never having had, or wished for, a holiday in thirty-five years save that necessitated by an attack of typhoid; or like Mr. BATEMAN of Islington, who worked fifty years with only an annual fortnight of holiday, to which he was compelled in his early life by recurrent attacks of hæmoptysis; or like Mr. MICHAEL FOSTER of Huntingdon, whose name and virtues are so happily perpetuated. Some have died in their comparative youth, like Dr. SIMPSON of Netley, or in the midst of their life and usefulness, like Dr. FAIRBANK of Windsor, or Dr. WILLIAM LAUDER LINDSAY of Perth. Some have come by their death in arduous conflicts with plague and climate, like JOHN MCDONALD of Buenos Ayres, who was left out of three medical men in a population of 150,000 stricken with yellow fever; some have died with the din of battle in their ears, bravely and at their post, and lie in Afghan cemeteries, like Surgeon-Major JOSHUA HENRY PORTER. Seldom has it been more difficult to do justice to the dead than in looking over our obituary for the year 1880.

In taking leave of our readers for the year 1880, we do so with all good wishes and with good heart. The social and commercial conditions of the country at large are improving. There are evils actual and threatening, but they are chiefly such as can be prevented by individual restraint and wise laws. It only needs that statesmen and individual men and women should take counsel a little more frequently of those whose business it is to study the great laws of health, as well as those of disease, to secure an unprecedented exemption from disease and an unparalleled development of national virtue and health. The days are gone for associating the calling of Medicine with disease. Our association is with health. As a profession, we urge on all movements for its preservation, and when lost, for its recall, and for the restriction of the movements of disease.

MR. LUTHER HOLDEN a few days since delivered his last Clinical lecture at St. Bartholomew's Hospital previous to retiring from the post of acting surgeon to this institution, after a service of more than forty years.

Annotations.

"Ne quid nimis."

THE DEBATE ON RICKETS.

THE adjourned discussion on Rickets was concluded at the meeting of the Pathological Society on Tuesday last. From lack of space this week, we must postpone a full consideration of the subject until our next issue. We certainly share the President's disappointment at the almost entire barrenness of the debate in facts of any kind, and particularly new facts. Theories, opinions, and suggestions have been freely expressed and exchanged, and in this way no doubt the ground has been cleared for future workers, and we may fairly hope, with Dr. Fagge, that the real result of the discussion will be found in the new interest awakened in the subject, and in the stimulus and point it will give to investigation. It has been thus with other of the formal discussions at the Societies; they have been starting-points rather than winning-posts, in which old cumbrous and useless nomenclature, and the various text-book impediments of accumulated unsupported views, have been disposed of; or, to change the simile, they have been destructive rather than constructive. Those who hope that they can be other than this must be disappointed, although the ultimate result may thoroughly demonstrate their value.

FOOTBALL ACCIDENTS.

THE late fatal football accident has naturally given rise to many remonstrances against the importation into a pastime of rules which seem to involve an undue amount of danger. The regulation of such matters we must leave to our sporting contemporaries, but we would remark that, while we deprecate unnecessary and unmeaning risks of all kinds, a certain danger is inseparable from all athletic sports. The cricket-field, the hunting-field, the race-course, the racket-court, and the arena of athletic sports, all number a good many maimed, or even killed, among their votaries, but the undoubted value of athletic exercises to the individual, and the nation, more than counterbalances the occasional mishaps which must inevitably occur. While it is advisable to avoid anything approaching to brutality in our pastimes, it is equally necessary not to encourage effeminacy, especially in this age when manufacturers of "gentlemen's corsets" flaunt their advertisements in the public press, and men of the modern æsthetic school write maudlin poems in praise of each other. There are many pastimes infinitely more ruinous to health than those we have enumerated above. Dancing night after night in crowded non-ventilated rooms is among the most unwholesome and dangerous practices of modern life, and kills infinitely more persons (though more indirectly) than either the "Rugby" or the Association Rules. The men who are killed by sitting in public-houses, or (what is very much the same thing) in club houses, playing billiards or cards till the small hours and drinking "B. and S.," are not held up as warnings, while their fellows who happen to be killed while engaged in some sport which has in it a dash of nobility and pluck, are spoken of as "frightful examples" of the evils of this or that amusement. If by undue roughness or by unfairness one man kills another at a game, the ordinary law is sufficient to deal with him. This is enough protection, and we very much object to a return to anything approaching the sumptuary laws of a bygone age. The science of medicine has lately had its liberty seriously curtailed by sentimentalists. We shall very soon be restricted in our choice of diet by the followers of Sir Wilfrid Lawson. Only last session an absurd Bill about acrobats met with a certain amount of favour in the House of Commons, and if a stand be not made our Imperial Vestrymen, whose watch-

word—save the mark!—is "Liberty," may be asked to regulate the method to be pursued in kicking a football, and impose a limit on the growing prowess of the rising generation.

THE ALBERT MEDAL.

WE have much pleasure in announcing that Her Majesty the Queen has been graciously pleased, on the recommendation of the Prime Minister and the Secretary of State for War, to award the Albert Medal for saving life to Surgeon Henry Grier, of the Army Medical Department, for his gallant and heroic conduct in endeavouring to save the life of the late Lieut. Graham, 2nd Battalion 10th Regt., stationed at Malta. Mr. Graham was suffering from diphtheria in the most virulent form, and had undergone the operation of tracheotomy for relief of some of the most urgent symptoms; the tube became blocked, and suffocation was imminent, when, other efforts having failed, Mr. Grier, at imminent risk, sucked the poisonous matter and diphtheritic membrane from the wound, and succeeded in restoring the life of his patient. Mr. Graham unhappily succumbed a day or two afterwards from exhaustion and extension of the disease. Mr. Grier is, we believe, the first member of the medical profession on whom the Albert Medal has been bestowed, and we congratulate him heartily on the honour which has been conferred on him, and through him on the medical service of the Army.

HERBALIST'S SURGERY.

AN important case came before the Coroner's Court at Old Basford on the 8th inst., which from its surgical and medico-legal aspects is alike important. From the report in the *Nottingham Daily Guardian* we gather that a man, thirty-seven years of age, was suffering from some trouble in connexion with his bladder or urethra, and on hearing from a friend of his—Mr. Marlow, a herbalist—that if sent for he could do him good, he sought his aid. The herbalist "attempted to draw his water, but instead of that drew blood." Mr. Maltby, a surgeon, was then called in, and found the man collapsed, in great pain, and passing bloody urine; he quickly developed symptoms of peritonitis, from which he died. At the autopsy no urethral stricture was found, but there was a false passage, about three inches long, from the urethra, and piercing the neck of the bladder, which was probably the exciting cause of the fatal peritonitis. It is obvious that considerable violence must have been employed in this case, and while forcible catheterism is not justifiable, even where the passage is obstructed by a stricture, it is still less pardonable where there is no obstruction at all. The fact that skilful surgeons sometimes make false passages in front of tight strictures has no bearing whatever on such a case as this, where there appears to have been no obstacle whatever to the passage of an instrument properly used. The surgical point in the case, however, is obvious, and we need not further allude to it. The coroner was at great pains to instruct the jury as to the principles by which they were to be guided in coming to their verdict, which was that the man died from peritonitis. It is to the coroner's law that we would specially call attention. He said "a mistake had been made," but that Marlow could not be held to be criminally responsible. He argued that as the operation of passing a catheter has been done very frequently by patients for themselves, it was an operation which an unskilled friend was qualified to do for the deceased. But he seems to have lost sight of the fact that Marlow offered his services to the man with the assurance that he could relieve him, and there can be no doubt that he gave the patient the impression that he was skilled in the treatment of such cases, and professed to be qualified to pass a catheter. Had he possessed a qualification to practise, an action for malapraxis would undoubtedly have laid against him.

A VETERINARY COLLEGE FOR IRELAND.

A DEPUTATION has waited upon the Lord-Lieutenant for Ireland, urging upon him the necessity for establishing a Veterinary School in Dublin, to supply the requirements of the sister island. The veterinary profession does not appear to have been represented in the deputation, nor do its wishes or views seem to have been obtained. The principal speaker certainly gave evidence of this in the very inaccurate statements he made on the subject, some of which were calculated to mislead. Veterinary schools in England and Scotland are self-supporting, and receive no Government assistance; but the Government is now asked to give a grant of £10,000 to commence this school, which, we feel assured, unless annually subsidised by large sums, could not exist for more than two or three years. It is also desired that the proposed school shall be empowered to grant licences to practise veterinary medicine. We look upon this request with the gravest apprehension. No medical school should be allowed to license its own students; and the Government has hitherto refused this privilege with regard to veterinary surgery, application having repeatedly been made by the Highland and Agricultural Society of Scotland for power to grant diplomas to veterinary surgeons, which was declined on the ground that the Royal College of Veterinary Surgeons was alone competent to examine and license students. The Royal College, the body corporate of the profession, has an examining board in London, Edinburgh, and Glasgow, and could also establish one in Ireland if necessary. In such a small body as the veterinary profession two or more diploma-conferring bodies would simply mean a low standard of professional education; and as this is not beneficial to owners of animals, nor yet to the animals themselves, much less to the profession, the request should be resisted.

We even seriously doubt whether there is any necessity for a veterinary school for Ireland, for the simple reason that that country can support very few veterinary surgeons; even at the present time there are many there who cannot obtain a living from the practice of their profession. They receive no countenance at all in some parts of the country by boards of guardians and others who have the bestowing of different appointments, political and religious prejudices largely influencing them. From these, and also from motives of economy, quacks and unqualified men are only too often preferred to veterinary surgeons who may be residing in the same district. From what we can learn, the supply of veterinary surgeons in Ireland is much more than equal to the demand, and to add to the present sources of supply would only increase the inconveniences and drawbacks already existing. The application has been made without due consideration, and we would suggest the collecting of evidence and obtaining the opinions of those most competent to judge, before committing the country to a new cause of expenditure, and injuring a profession which is now, by its one-portal system of granting degrees, beginning to make rapid strides.

One thing is certain—that if a school is maintained in Ireland at the public expense, the schools in England and Scotland will have strong claims also for subsidy, and will undoubtedly demand it.

DR. RICHARDSON AND THE LONDON SCHOOL BOARD.

DR. RICHARDSON has distinguished his election to the London School Board and his entry upon the duties which appertain to the members by saving the Board, if not from impending suffocation, at least from suffocative procedures. Before he had well settled down into his seat at the Board, Dr. Richardson discovered that the Board-rooms, notwithstanding the happy position of the building in which it is

situated, is so imperfectly ventilated as to threaten the members with dangerous results to their health. Dr. Richardson says nothing of what the results must have been, short of obvious evil physical consequences to the members, upon the mental deliberations of the Board; but it may be inferred, so energetic has he shown himself in the matter, that he objects to take part in deliberations of which it would be difficult to say how much of the results came from natural cerebral action, how much from foul air acting upon the cerebration. There is something particularly absurd in the conception of the chief Educational Body in the metropolis carrying on its functions under circumstances deleterious alike to sound health and clear thought for a period of several years, *without having discovered* it, and that the discovery should have been left to be made by the casual importation of a new member. The Board has reason to congratulate itself upon the election of Dr. Richardson, not only from the additional weight his presence will give to many of its deliberations, but also from his having already saved them (or being about to save them) from certain sanitary shortcomings which have unwittingly been permitted in the Board's official residence. The incident suggests that the Board would do well to ask Dr. Richardson to make a sanitary survey of the numerous new schools which have sprung up under their auspices, and which externally at least recall the premises on the Thames Embankment.

THE following resolution was unanimously passed on December 9th, 1880, by the East Surrey district of the South Eastern branch of the British Medical Association at a meeting held at Croydon:—"That this meeting desires to express to Dr. Habershon and Mr. Cooper Forster its sympathy in the painful circumstances which have led to their withdrawal from the staff of Guy's Hospital; and its appreciation of the manly spirit which has induced them to resign their respective appointments, sooner than submit to a loss of professional dignity, or sanction changes which they believed to be detrimental to the interests of the patients entrusted to their care."

AT a meeting of the Master and Fellows of Gonville and Caius College, Sir George Burrows, M.D., F.R.S., and George Budd, M.D., F.R.S., members of the College, were elected Honorary Fellows of the Society.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF THE MEDICAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Huntingdon (*Registration District*).—*Scarlet Fever.*—This report, from the pen of Dr. Parsons, gives the result of an inquiry into the recent prevalence and long continuance of scarlet fever in the urban sanitary districts of Huntingdon and Godmanchester, and the extension of the disease (as it was feared) from the urban districts into the rural sanitary district of Huntingdon. The report presents a curious picture of the sanitary negligence obtaining in the urban districts, and the practical lapse of the public health law there in many things, as also to a great extent in the rural district. For example, Huntingdon has an old so-called "pest-house," available for use as an infectious disease hospital, but which is given up for residence to a man with a family, and which, during the whole continuance of the scarlet fever, was not used for the isolation of a single case, because, for one reason among others, the occupant had a family of young children who might become infected. Neither Godmanchester nor the rural sanitary authority possesses hospitals. Recommendations how to deal with epidemic disease seem powerless when some of the most ordinary measures for the sanitary administration of a place are in default, seem purposeless, particularly when it appears pretty obvious that nothing short of an epidemic of cholera or plague would arouse the local authorities to a proper sense of their sanitary responsibilities. Dr. Parsons, nevertheless, makes recommendations, the necessity for which must have been as well known to the authorities before his visit as after. The threatened extension of scarlet fever into the rural sanitary district appears happily to have ended without any serious consequences; but we should have been glad to have known how Dr. Parsons, who has had previous large experience of the needs and difficulties of a rural sanitary district, would have carried into practice his recommendations to the rural sanitary district. Beneath our breath be it whispered (if a pen for the moment be assumed to breathe and whisper) the reports of the medical department have not hitherto given us much light in this direction. The department is getting too much into the habit of stating merely the requirements or permissions of the law, not suggesting how the requirements may be met. Perhaps we may get more practical light on the subject of isolation when Dr. Thorne Thorne completes the inquiry as to sanitary hospitals, on which he is now engaged.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Brighton.—The report of the medical officer of health for Brighton, Dr. Taaffe, for the quarter ending September 30th, shows that the births equalled an annual rate of 28·6, and the deaths of 22·8, per 1000 of the estimated population. The report gives particular attention to the subject of the mortality from diarrhœa among infants and young children, and enters into a detailed statement of the sort of feeding which the infants had who died of diarrhœa during the quarter. In the year 1875 Dr. Taaffe carried out a similar inquiry with reference to fatal cases of diarrhœa among infants during the summer quarter. The results of the two inquiries substantially confirm each other. The great majority of the infants were artificially fed, and of the few fed at the breast several were subjected in a measure to the evils attaching to artificial feeding. Dr. Taaffe's observations lead him to the conclusion that the fatal summer diarrhœa of infants arises from improper feeding at a season when artificial foods are peculiarly apt to undergo change, particularly if great care and cleanliness are not observed; and when the intestinal canal is under the influence of high temperature, especially if at such time the atmosphere be polluted with the effluvia from defective sewers and accumulations of putrescent filth. Dr. Taaffe's report can scarcely fail to influence the action of the sanitary authority in this matter, and exercise a generally beneficial result upon the care of infants and young children in Brighton.

SCARLATINA CULTURE IN WHITECHAPEL.

A child died a few days ago of scarlet fever in Whitechapel. The registrar of deaths gave information to the sanitary authority, and thereupon the sanitary inspector, Mr. Skidmore Wrack, visited the house where the death had occurred. He found that it consisted of four rooms only, and was inhabited by two families. In the front room on the ground floor lay three children, suffering from scarlet fever, occupying it with the father and mother; in the back room lay the body of the dead child. The two upper rooms were occupied by a man, his wife, and five children, the children having been in attendance at a Board School during the whole period of sickness in the rooms below. But for the death of the child in the lower rooms nothing of this would have become known, and when it did become known such mischief as could have been done by the infected family had probably been done. The Board School being informed of the case excludes the children from the upper rooms, and so makes their infection tolerably sure by their retention at home, if it had not before occurred. The cultivation of scarlet fever under these circumstances is unavoidable, and the only chance the sanitary authority has of limiting the extension of the disease under such circumstances is by getting the earliest information of it. Pending general legislation on the subject, cannot the Metropolitan Sanitary Authorities follow the example of some of the great northern towns, and seek special legislation?

THE SMOKE NUISANCE.

A deputation of the Manchester Association for Controlling the Escape of Noxious Vapours from Manufactories recently had an interview with the Health Committee of the Salford Corporation, in order to urge upon them the adoption of more stringent measures for the suppression of the smoke nuisance. The Salford Committee deprecated any notion that the Corporation had been heedless in this matter, and flattered itself with the belief that the Salford atmosphere was "immeasurably" superior as to freedom from smoke to that of Sheffield, Leeds, Wolverhampton, Warrington, or Bolton. They could not hope to purify their atmosphere wholly of smoke, and in making matters too stringent for the suppression of smoke, they might incur a greater evil as affecting the welfare of the operatives. Indeed, better and more readily practicable methods of smoke-consumption must be waited for before all could be done towards suppression of the nuisance to the extent that was desirable. In short, the remarks of the committee remind us of an incident in a town not far distant from and as "smoky" as Salford. Not very long ago, standing on the hills above the town on a Sunday afternoon, and chancing to fall into conversation with an operative, we remarked on the pleasant aspect of the place without its customary pall of smoke. "Bonny enough," was the answer (we do not attempt to reproduce the dialect), "but, ah! my lad, if you had seen, as I have seen, more than once, this pretty prospect day after day, with no smoke from the long chimneys, *and no food in the cupboard, but with wife and children on the hearth*, you would not look on this pretty scene oven on a Sunday afternoon without feeling a turn inwards."

Dr. Bridges has completed his inquiry into the disagreement between the medical officers of the St. George's-in-the-East Poor-law infirmary. The evidence will be submitted to the Local Government Board, with whom rests the decision as to the results and the determination of the measures to be taken, if any, to put an end to the state of things which led the Board of Guardians to invoke the Board's interference in the matter.

It has been resolved by the Epsom Rural Sanitary Authority that a fee of 2s. 6d. be paid to any medical practitioner in the district who shall first report (on a printed form provided for the purpose) to the inspector of nuisances the outbreak of certain infectious diseases in any part of the sanitary area. The Chertsey, Dorking, and Reigate unions, it appears, have already adopted a similar regulation with advantage.

A local paper states that of sixty-nine cases of "scarlet fever" reported to have occurred recently at Darwen, in Lancashire, *one* only, on an inquiry made by the medical officer of health, proved to be a case of that disease.

We are glad to observe the admirable way in which our contemporary, the *Graphic*, deals with the question of vaccination, and the suicidal folly of the anti-vaccinationists.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

Under the influence of continued unseasonably mild weather English urban mortality showed a further decline last week. In twenty of the largest English towns, estimated to contain in the middle of this year a population of seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 4964 births and 2793 deaths were registered last week. The births were 221, and the deaths so many as 482, below the average weekly numbers during 1879. The deaths showed a further decline of 89 from the low and decreasing numbers in recent weeks; and the annual death-rate per 1000, which had been equal to 22·1, 20·6, and 20·1 in the three preceding weeks, further declined last week to 19·4, a lower rate than has prevailed in any week since the middle of July last. The lowest death-rates in the twenty towns last week were 13·0 in Wolverhampton, 14·6 in Norwich, 15·9 in Portsmouth, and 16·0 in Brighton. The rates in the other towns ranged upwards to 21·0 in Manchester, 21·1 in Liverpool, 23·7 in Plymouth, 24·6 in Sunderland, and 25·5 in Nottingham. During the past eleven weeks of the current quarter the death-rate in these twenty towns averaged only 21·6 per 1000, against 22·9 in the corresponding periods of the four years 1876–79.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had been 358 and 370 in the two preceding weeks, were 375 last week; they included 129 from scarlet fever, 74 from whooping-cough, 63 from measles, and only 32 from fever, principally enteric. The annual death-rate from these seven diseases averaged 2·9 per 1000 in the twenty towns, and ranged from 0·7 both in Wolverhampton and Newcastle-upon-Tyne, to 3·8 and 4·5 in Hull and Sunderland. The 129 fatal cases of scarlet fever in the twenty towns, showed a further decline from recent weekly numbers; the largest proportional fatality occurred in Sunderland, Bristol, Manchester, and Bradford. Measles fatality was largest in Brighton and Salford, and that of whooping-cough in Nottingham, Hull, and Liverpool. The deaths from fever, principally enteric, which were 78 in the twenty towns in the second week of July, have since steadily declined, and were but 32 last week. Of the 19 deaths from diphtheria last week, 12 occurred in London, and 2 in Salford. Small-pox caused 33 more deaths in London, and one in Manchester; whereas no fatal case was returned in any of the eighteen other large towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased from 77 to 338 in the seven preceding weeks, further rose to 273 on Saturday last. The number of new cases of small-pox admitted to these hospitals, which had been 67 and 122 in the two previous weeks, fell again to 76 last week. The number of patients in the Highgate Small-pox Hospital were 26 on Saturday last, and 4 less than at the end of the previous week.

The deaths referred to diseases of the respiratory organs in London, which had been 334 and 295 in the two preceding weeks, were 307 last week, and were no less than 239 below the corrected average number in the corresponding week of the ten preceding years; 180 resulted from bronchitis, and 79 from pneumonia. The annual death-rate from lung diseases was equal to 4·4 per 1000 in London, and 4·9 in Liverpool.

In the twenty towns last week 67 uncertified causes of death were registered, equal to 2·4 per cent. of the total deaths. The proportion of uncertified deaths did not exceed 1·7 per cent. in London, whereas it averaged 3·0 per cent. in the nineteen provincial towns. No uncertified deaths were registered in eight of the twenty towns, whereas their proportion was largest in Wolverhampton, Bradford, Sheffield, and Sunderland.

HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, the annual death-rate last week averaged only 19·9 per 1000, against 24·7, 22·1, and 21·7 in the three preceding weeks; this low rate exceeded, however, by 0·5 the still lower average rate in the twenty large English towns. The rates in the eight Scotch towns last week ranged from 15·4 and 19·1 in Dundee and Aberdeen, to 25·8 and 27·6 in Leith and Paisley. The deaths referred to the seven principal zymotic diseases in the eight towns, which had been 112, 95, and 91 in the three preceding weeks, further declined to 80 last week. The annual death-rate from these seven diseases averaged 3·2 per 1000. In the eight Scotch towns the zymotic death-rate last week ranged from 1·0 in Dundee, to 4·2 and 6·2 in Paisley and Leith. The fatal cases of scarlet fever in the eight towns, which had declined in the five preceding weeks from 53 to 33, further fell to 17 last week, of which 9 occurred in Glasgow (corresponding with the number in the previous week) and 7 in Edinburgh and Leith. The 17 deaths referred to diphtheria included 10 in Glasgow and 4 in Edinburgh. The 13 deaths from whooping-cough corresponded with the number in the previous week. The 13 fatal cases of diarrhœa again showed an excess upon the average numbers for the season. The annual death-rate from lung diseases was equal to 4·9 per 1000 last week in the eight Scotch towns, against 3·9 in London; the highest death-rates from these diseases in the eight Scotch towns occurred in Leith, Paisley, and Greenock.

HEALTH OF DUBLIN.

The death-rate in Dublin showed a further decline last week. The annual death-rate from all causes within the city, which had declined from 30·6 to 27·2 in the five preceding weeks, further fell to 25·9 last week, a lower rate than has prevailed in the city in any week since the be-

ginning of October, 1879. During the first eleven weeks of the current quarter the death-rate in the city averaged, however, 32·9 per 1000, against 21·0 in London, and 22·0 in Edinburgh. The 156 deaths in Dublin last week showed a further decline from recent weekly numbers, but included 24, or 15 per cent., which were referred to the seven principal zymotic diseases, or 6 more than those in the previous week; 11 resulted from scarlet fever, 7 from fever (including typhus, enteric, and simple), 3 from whooping-cough, 1 each from small-pox, measles, and diarrhœa, and not one from diphtheria. The annual death-rate from these seven zymotic diseases was equal to 4·0 per 1000 in Dublin last week, against 2·9 in London, and 2·7 in Edinburgh. The fatal cases of scarlet fever, which had been 7 and 6 in the two previous weeks, rose to 11 last week. The 7 deaths referred to fever showed a further decline from the excessive numbers in recent weeks, but were proportionally more than five times as numerous as the deaths from the same cause in the twenty large English towns. The 3 deaths from whooping-cough corresponded with the number in each of the two previous weeks. The deaths of infants differed but slightly from the numbers in the two previous weeks, while those of elderly persons showed a further decline.

THE SANITARY ASSURANCE ASSOCIATION.

A meeting of the members and subscribers of the Sanitary Assurance Association was held recently at the Langham Hotel, Sir Joseph Fayrer presiding, and Professor Tyndall taking part in the proceedings. A report of the proposed organisation of the Association was presented and adopted, and promises well for future success. One of the great advantages which the Association offers was aptly stated by Dr. Poore in the course of the meeting. Medical men, while often conscious that their patients are occupying houses which probably possess grave sanitary defects, are usually at a loss how to advise them to set about the discovery of these defects. The Association offers an easy and cheap way out of this difficulty. Persons may have recourse to it with confidence for a skilled examination and trustworthy report on their premises, and wise people will anticipate as far as practicable the need for the doctor by becoming permanent subscribers to the Association, and steadily availing themselves of the advantages it offers.

THE SERVICES.

TROOPS AT SHOEBURYNESS.

In the *Army and Navy Gazette* of the 11th inst. attention was called to the sanitary condition of Shoeburyness, which was described as "far from satisfactory. Typhoid fever is constantly occurring there, and is very prevalent in the neighbourhood." We have made particular inquiry into the matter, and find that, so far at least as the troops are concerned, this statement is quite erroneous. They are remarkably healthy, and not a single case of typhoid fever has occurred among them for a considerable period. Last year, in consequence of complaints regarding the quality of the water supplied to them, the War Office, on the recommendation of the Director-General, sanctioned the issue of spongy-iron filters to every barrack and quarter at the station, and this measure has been attended with the most satisfactory results, and the water is described as quite pure and good.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Joseph Johnston, M.D., has been granted retired pay, with the honorary rank of Brigade-Surgeon. Surgeon-Major William Snowdon Hedley, M.D., has retired upon temporary half-pay.

MADRAS MEDICAL ESTABLISHMENT.—To be Surgeon-Major: Surgeon Frederick Henry Blenkinsop.

MILITIA.—Surgeon Henry Steele, Forfar and Kincardine Artillery, resigns his commission.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The first meeting of the twenty-fifth session of this Society took place on Oct. 8th, 1880, when an address was delivered by Dr. Harry Knight Hitchcock, who was elected President in succession to Mr. J. P. Purvis, in which he gave a *résumé* of the advancement of medical science during the past year.

Obituary.

FRANK BUCKLAND.

DEATH has removed from our midst, at a comparatively early age, one whom the public service can badly spare, and the loss of whom has excited deep and almost general regret. Frank Buckland died at 37, Albany Street, on the morning of the 19th inst., the victim of a chronic disease which, though it had lately incapacitated him from leaving his house, yet left his mind unaffected up to the last. He was born on December 17th, 1826, and was consequently only two days over fifty-four years of age. The son of the Very Reverend William Buckland, D.D., Dean of Westminster, well known in his day as a geologist and palæontologist, but whose fame is perhaps most closely associated with the valuable Bridgewater Treatises, young Buckland commenced his scholastic career at Winchester School, and terminated it at Christ Church, Oxford. Selecting medicine as a career, he studied in London and Paris; and having graduated he served the office of House Surgeon at St. George's Hospital for some time. A commission having been offered him in the Household Cavalry, he joined the 2nd Life Guards in 1854 and served in the regiment as Assistant Surgeon until 1863. Whatever fancy he may have had for his profession when he first entered it, it soon became evident that his bent was zoology, or rather what is called natural history. He was fond of keeping all kinds of animals, rare or common, and even while in the Life Guards his barrack-room was often more like a miniature menagerie than the *sanctum* of a Guardsman. This characteristic he had certainly exhibited from his earliest days, but it was all-absorbing as he reached middle life, and perhaps no more keen observer of animal life or student of animal nature has been known in our days. Between him and animals and birds there almost immediately sprang up the closest intimacy, if not sympathy, and there were few creatures he could not make a companion of, more frequently an attached friend, after one or two interviews. We need not wonder that the *Field* at an early period received many communications on natural history from him, and when he left the Guards he was, if not on the staff, at least a regular contributor. *Land and Water* was started, in conjunction with a great authority on piscatorial matters, Mr. Pennell, in 1866, and it was in this periodical that he recorded all his current observations on matters connected with natural history, particularly in its practical aspect, and gave information as to sea and river fisheries. Many curious and valuable facts are recorded here, for Buckland collected material from every source, and nothing in the way of a new species or new variety, an unusual or unknown habit, or monstrosity or freak of nature of any kind, ever came amiss to him. Pisciculture, however, may be said to have been his speciality, and he had already made himself a name in connexion with it when, in 1867, the Government made him Inspector of English Salmon Fisheries, and in 1870 the trust was extended when he was appointed Special Commissioner for the Salmon Fisheries of Scotland. In this office his intimate knowledge of fish habits and fish-breeding served him and the country well, and if anyone cares to know what he has done in the way of improving the quantity and quality of various kinds of freshwater fish, increasing the supply of sea fish, introducing trout and salmon into new rivers of new countries, protecting fish from waste and unnecessary destruction, he has only to refer to the many Blue Books which contain his reports, and the reports of commissions of which he was a member. His indomitable exertion and enthusiasm led him to accomplish more in developing the resources of our rivers and seas than any other man had ever done, and his system of fish culture is so excellent that it has been adopted very largely in other countries. In this way he was a most excellent public servant, and to him the country is greatly indebted.

So long ago as 1857, he published four series of "Curiosities of Natural History," volumes teeming with strange and curious facts about many kinds of animals; in 1873 a "Familiar History of Fishes" appeared; and the "Logbook of a Fisherman and Zoologist" in 1876. Last year he edited a splendid edition of Gilbert White's perennial "Natural History of Selborne." In all these, as well as in his other writings, we find natural history treated in the most simple

and yet most attractive and instructive manner. Indeed, few can deny that Frank Buckland has done very much to popularise natural history and place it before us in its most fascinating aspect. There are none of his writings which are beyond the depth of comprehension of an average schoolboy, and yet they contain great scientific truths.

Frank Buckland possessed many of his father's characteristics, and these are discerned in his writings. More especially did he inherit that genial humour and hearty appreciation of a joke which sometimes made the worthy Dean the subject of an anecdote. Vigorous in body, and original to a large extent in mind, he worked incessantly—physically and mentally. His collection at the South Kensington Museum is an example of the skill—artistic and scientific—he brought to his loved pursuit, and the patience and enthusiasm with which he was endowed. His intellect was quite clear and unclouded up to death, and he had been actively interesting himself in promoting a piscatorial show at Grimsby, and in getting up prizes for the fishermen—a class of men with whom he was most deservedly popular, and whose hard and dangerous occupation he did his utmost to ameliorate and brighten. His name will long remain green in the memories of those who knew him, as that of a good-hearted man, and a true public servant and benefactor.

Medical News.

UNIVERSITY OF LONDON.—The following candidate has passed the recent Examination in subjects relating to Public Health:—

Giles, George Michael James, St. Mary's Hospital.

UNIVERSITY OF CAMBRIDGE.—The following have passed the First Examination for the degree of M.B.:—

CLASS I.—None.

CLASS II.—Agar, B.A., Caius; Barker, Trinity; Barton, Caius; Beard, non-collegiate; Bishopp, non-collegiate; Blaker, non-collegiate; Castle, Pembroke; Challenor, B.A., non-collegiate; Clarke, Caius; Dumbleton, St. Peter's; Dunsterville, Corpus; Floyer, B.A., King's; Hinnell, Pembroke; Love, St. John's; Marshal, Clare; Nichol, Caius; Pash, B.A., Pembroke; Preston, Corpus; Raven, Emmanuel; Sidebotham, Caius; Smart, Caius; Smith, Caius; Sprigge, Caius; Stericker, Clare; Taylor, B.A., St. Peter's; Thurtell, B.A., Caius; Watts, Corpus; Whishaw, non-collegiate; Wilson, Jesus.

The following have passed the Second Examination for the M.B. degree:—

CLASS I.—Sherrington, Caius.

CLASS II.—Aldred, B.A., Caius; Bostock, B.A., Pembroke; Brinton, Downing; Dill, B.A., Caius; Fowler, B.A. Caius; Griffiths, M.A., Trinity; H. Groom, B.A., Magdalene; Hewitt, B.A., Christ's; Knowling, B.A., King's; Morris, B.A., Caius; Owen, B.A., non-collegiate; Peskett, B.A., Downing; Pollard, B.A., Caius; Richardson, B.A., King's; Slater, B.A., St. John's; Spicer, B.A., Caius.

The following have passed the second part of the Third Examination for the degree of M.B.:—

CLASS I.—Allster, M.A., St. John's; Mackern, Caius; Phillips, B.A., St. John's.

CLASS II.—Benthall, B.A., Pembroke; Brunton, B.A., St. John's; Clark, B.A., Christ's; Collier, B.A., Jesus; Gripper, B.A., St. John's; Jessop, B.A., Caius; Nichols, B.A., St. Catherine's; Weldon, B.A., Caius.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 16th:—

Bathe, Anthony John, Southampton.
Farrer, Robert Thompson, Brighouse, Yorkshire.
Galpin, George Luck, Grahamstown, Cape of Good Hope.
Garman, John Cornelius, Plumstead.
Norville, Frederic Harvey, Royal Infirmary, Bristol.
Wilson, George John, Western-road, Brixton.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Richard Hingston, London Hospital; Thomas Horsfall, Leeds School of Medicine; George Leonard Webster, King's College.

COLLEGE OF PHYSICIANS IN IRELAND. — At examinations held in December the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Francis E. Ackerley, Joseph Boyd, Robt. Joseph Browne, Arthur Wellesley Cadman, Edmund Corcoran, Wm. Joseph Fottrell, Edw. T. Geoghegan, Jas. Foulds Joseph, Richard Francis O'Brien, Janet Menteath Rushbrook, William Augustus West, Geo. Herbert Withington.

MIDWIFERY. — Francis E. Ackerley, Joseph Boyd, Robert Joseph Browne, William Joseph Fottrell, Edw. Thomas Geoghegan, Joseph Patrick Kealy, Richd. Francis O'Brien, Janet Menteath Rushbrook, William Augustus West.

The undermentioned Licentiates have been admitted Members:—

Robert Bradshaw, David John Browne, Mark Anthony Harte, John D. Hillis, Henry Lowndes, William Kildare Miley, George Jonathan Mitchinson, Thomas Tarrant (Brigade Surgeon, A.M.D.).

UNIVERSITY OF DUBLIN. — The following degrees were conferred in the Examination Hall, Trinity College, on the 15th inst.:—

BACHELOR IN MEDICINE. — Arthur Cockle, Stuart Davis, John Galbraith, John Mason, John Charles Martin, John Michael Nicolls, George Patterson, George Scriven.

BACHELOR IN SURGERY. — Henry Lewis Clare, Stuart Davis, William Spear Gordon, John Charles Martin, John Michael Nicolls.

MASTER IN SURGERY.—William Cox Nevill.

DOCTOR IN MEDICINE. — George A. Bluett, Francis Charles McNalty, William Cox Nevill.

LICENTIATE IN MEDICINE.—William Smyth.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. By the will of the late Sir Francis Lycett the Brompton Hospital for Consumption receives £500, St. Mary's Hospital £100, the Royal Free £200, the Cancer Hospital, Brompton, £200, the Royal Hospital for Incurables £300, King's Cross Hospital £500, the Truss Society £100, and the Victoria Park Hospital for Diseases of the Chest £500. Miss Matilda Cohen bequeathed £100 to the Brompton Hospital and to the Hospital for Incurables, Putney, and £50 each to the Sea-bathing Infirmary, Margate, and the Royal Victoria Hospital for Sick Children. "C. M. F." has given £100, Gervase Taylor £50, "Anonymous" £50, and "H." £50 towards the funds of the Adelaide Hospital, Dublin.

CAMBRIDGE AND EPSOM. — The Shuttleworth Scholarship of £60, tenable for three years, open to all registered students of the University, has been recently awarded to Mr. G. Bernard Hoffmeister, already a Natural Science Scholar (£60 a year) of Caius, youngest son of Dr. Hoffmeister of Cowes. Mr. Hoffmeister was also First Prizeman in Science in each of his three years of residence, and previously held the Forest and Gilchrist Scholarships, £50 each, for three years from Epsom College, the latter carrying with it a Free Medical Scholarship to St. Bartholomew's Hospital. In the Natural Science Tripos list, issued on the 18th inst., Mr. Hoffmeister's name appears in the First Class, and as distinguished in Botany.

OWENS COLLEGE.—At a meeting of the Council held at the College on the 17th inst. the following members of the medical profession were, on the recommendation of the Senate, elected to the associateship of the College:—Samuel Buckley, M.B. London, 1880, F.R.C.S. Eng., 1873; John James Kent Fairclough M.D. Queen's University, Ireland, 1877; John Thomas Faulkner, M.B. London, 1880; Thomas Hahnemann Hayle, M.B. London, 1876; John William Meek, M.B. London, 1880. A Platt Physiological Exhibition, of the value of £20, was awarded to Mr. Walter Hurst.

WE understand (says the "Herald and Weekly Free Press") that Dr. Forbes of Milburn has just endowed the Inverness Dispensary with £6000. This endowment will be under the management of trustees. The medical officer, who may be one of the practitioners of the burgh, will receive £100 of the interest of the fund, whilst £20 will be added to the salary of the superintendent, the rest of the endowment being devoted to the purchase of medicines and to meet the general expenses of the institution. The present medical attendant is Mr. F. M. Mackenzie.

THE LATE ROBERT HARKNESS, F.R.S.—During last summer a costly memorial window was placed in the Examination Hall of the Queen's College, Cork, to the memory of Professor Harkness. The deceased gentleman, who was a distinguished geologist, died in 1878, and formerly held the Professorship of Geology in the Queen's College, Cork, and latterly also of Natural History.

IN consequence of the recent fatal football accident in Southampton, the Mayor of that town has issued a notice prohibiting the pastime on the public lands as long as it is played according to the Association or Rugby rules, and he calls on the heads of families and schools to support him in his endeavour to modify the practice of the game.

THE Bazaar and Fancy Fair held last week on three several days, at the Ulster Hall, Belfast, for the benefit of the Belfast Royal Hospital, has, we understand, fully realised what was anticipated; and a very large amount will be added to the funds of this charity.

PROFESSOR DEWAR will give the first of his Christmas Lectures (adapted to a juvenile audience) on Atoms, on Tuesday next, Dec. 28th, at three o'clock, at the Royal Institution.

MR. W. J. FULLER, resident surgeon of the St. Marylebone Workhouse, will be granted a superannuation allowance of £80 a year on resigning his appointment.

THE Lord Mayor of London has consented to perform the ceremony of opening the new Temperance Hospital buildings in the Hampstead-road, on Friday, March 4th.

DR. O'SULLIVAN has been elected Mayor of Limerick for 1881.

CONTRIBUTORS TO THE LANCET FOR 1881.

SUPPLEMENTAL LIST.

ALEXANDER, WILLIAM, Surgeon-Major, M.D., Queen's Univ., Irel., Military Station Hospital, Bradford.

BROWN, A. GARDINER, F.R.C.S. Edin., Aural Surgeon to the London Hospital.

CHRISTIE, J., M.D. [Glas., Lecturer on Hygiene and Public Health at Anderson's College; Medical Officer of Health, Hillhead; Dispensing Surgeon to Western Infirmary, Glasgow.

CHURCHILL, F., M.D. Edin., Surgeon to the Victoria Hospital for Children; Honorary Surgeon to the Young Women's Home, Sloane-street, London.

COOKSON, S., M.D. St. And., Medical Officer and Public Vaccinator, Castle Church District, Stafford Union.

DAVIES, N. E., L.R.C.P. Lond., M.R.C.S. Eng., Hon. Physician and Surgeon, Yeatman Hospital, Sherborne.

DOWN, J. L. H., M.D. Lond., Physician to the London Hospital.

DUKE, ALLEN, M.D. St. And., Surgeon to the Dover Hospital and Chichester Infirmary.

DUNLOP, A., M.D. Edin., Honorary Medical Officer to the Jersey General Dispensary.

DUNLOP, W. M., M.B. Glasg., Resident Medical Officer to the St. Pancras Workhouse, King's-road, N.W.

GILES, P. B., Jun., L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health, Hay Rural District.

GREENWAY, H., M.R.C.S. Eng., Medical Officer of Health, Plymouth Borough; Consulting Ophthalmic Surgeon to Plymouth Provident Dispensary.

HARRIS, V. D., M.D. Lond., Consulting Physician and Demonstrator of Physiology to St. Bartholomew's Hospital; Assistant Physician to Victoria-park Hospital.

JACKSON, T. V., M.R.C.S., Senior Surgeon at Wolverhampton and Staffordshire General Hospital.

JOHNSON, R. LOCKE, L.R.C.P., L.R.C.S. Edin., Physician to North London Consumption Hospital; Physician to St. John's Hospital for Skin Diseases, Leicester-square.

KEIR, W. INGRAM, L.R.C.P., L.R.C.S. Edin., Medical Officer of Health, Rural Sanitary Authority, and Surgeon to Cottage Hospital, Melksham.

LUSH, W. J. H., M.D., F.R.C.P. Ed., M.R.C.S., F.L.S., Hon. Visiting Medical Officer to the Andover Cottage Hospital, Associate (late Warneford scholar), King's College, London.

MAY, E. HOOPER, M.D. St. And., F.R.C.S. Eng., Surgeon to the General Dispensary and to the Training Hospital, Tottenham.

MEREDITH, W. A., M.B. Edin., M.R.C.S. Eng., Surgeon to the Samaritan Free Hospital for Women and Children, and Anæsthetist to Seymour-street Branch.

O'CONNOR, B., M.D., M.R.C.P. Lond., Physician to the Westminster General Dispensary, Gerrard-street, W.

PATON, J., M.B. Glasg., Surgeon to the Greenock Hospital.

PHILLIPS, E. E., L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health, South-end Urban District, and Rochford Rural District.

PRIDEAUX, ENGLEDUE, L.R.C.P. Lond., M.R.C.S. Eng., Medical Officer to the District and Union House of Wellington.

RIVINGTON, W., M.B., F.R.C.S. Eng., Surgeon, London Hospital, Lecturer on Human Anatomy to London Hospital Medical College.

ROSS, R., M.D. St. And., Physician to Belfast Royal Hospital.

STOKER, W., F.R.C.S. Eng., Senior Surgeon, Durham County Hospital.

TROUP, R. W., Surgeon-Major, M.B. Aberd., Canterbury.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ALTHAM, J., M.B., has been appointed House-Surgeon to the Royal Surrey County Hospital, Guildford.

BATTLE, W. H., F.R.C.S., has been appointed Surgical Registrar to St. Thomas's Hospital Medical School for 1881, vice H. P. Porter, F.R.C.S., whose appointment has expired.

CLARKE, R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Third District of the Hailsham Union.

DINGLE, W. A., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Homeless Poor Asylum, St. Luke's.

EMMERSON, W. L., M.D., has been appointed Public Analyst for the Borough of Stamford for one year.

FRASER, D. A., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for Burnham, Somersetshire, vice Moore, resigned.

GALBRAITH, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the South Gooforth Urban Sanitary District.

GORDON, J. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Ludham District of the Smallburgh Union.

GROOME, W. W., M.B., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the First District and the Workhouse of the Stow Union.

HALL, J. G., M.B., C.M., has been appointed Fourth Surgeon to the Aberdeen Royal Infirmary and Lunatic Asylum.

HAMILTON, G. S., L.R.C.P., L.R.C.S.Ed., has been appointed Assistant House-Surgeon to the Liverpool Northern Hospital, vice C. Shears, L.R.C.P.L., promoted.

JACKSON, G. J., M.R.C.S.E., has been appointed Visiting Surgeon to the London Diocesan Deaconess Institution, Tavistock-crescent, W., vice G. Hastings, M.D., resigned.

JAMES, W. D., M.R.C.S.E., has been appointed an Honorary Surgeon to the Sheffield Public Hospital for Skin Diseases.

JONES, R., M.B. &c., has been appointed Assistant Medical Officer to the Earlswood Asylum, Surrey, vice Spence, M.D., resigned.

KNOX, T., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Workhouse of the Maguiresbridge District of the Lisnaskea Union.

MARTIN, J. W., M.D., has been appointed Honorary Physician to the Sheffield Public Hospital for Skin Diseases, vice G. H. De Wolfe, M.D., resigned.

OLIPHANT, J., M.D., has been appointed Public Vaccinator to the Western District of the Leicester Union.

PRINCE, F. T., M.R.C.S.E., has been appointed Surgeon to the St. George, Hanover-square, Provident Dispensary, vice J. H. Morgan, F.R.C.S., resigned.

ROOME, H. A., M.B., C.M., has been appointed Honorary Assistant Medical Officer to the Royal Surrey County Hospital.

ROSS, Mr. T., has been appointed Assistant to the Extra Physicians of the Royal Hospital for Sick Children, Edinburgh.

SHEARS, C. H. B., L.R.C.P.L., M.R.C.S.E., has been appointed House-Physician to the Liverpool Northern Hospital, vice D. M. Fraser, M.B., resigned.

SMALE, M., M.R.C.S.E., L.S.A.L., L.D.S.E., has been appointed Medical Tutor to the Dental Hospital of London, Leicester-square.

STOKES, H. F., L.R.C.P.L., M.R.C.S.E., has been appointed Registrar and Chloroformist to the Evelina Hospital for Sick Children.

SYKES, W. J., M.D., has been appointed Medical Officer of Health for the Portsmouth Urban Sanitary District, vice Turner, resigned. Also Public Analyst for the same District.

TAYLOR, Mr. T. P., has been appointed House-Surgeon to the Essex and Colchester Hospital, vice Wells, resigned.

THOMSON, W. S., M.D., C.M., L.F.P.S.G., has been appointed Medical Officer of Health for the Peterborough Urban Sanitary District.

WILLIAMSON, G. E., F.R.C.S.E., has been appointed Assistant-Surgeon to the Newcastle-on-Tyne Infirmary.

Births, Marriages, and Deaths.

BIRTHS.

HEELAS.—On the 14th inst., at Erskine Lodge, Primrose-hill-road, N.W., the wife of James Heelas, M.D., of a daughter.

RYAN.—On the 4th October, at Gympie, Queensland, the wife of John Pennefather Ryan, L.K.Q.C.P.I., L.R.C.S.I., of a son.

WOLSTON.—On the 19th inst., at 46, Charlotte-square, Edinburgh, the wife of Walter T. P. Wolston, M.D., of a son (stillborn).

MARRIAGES.

BROOKE—LIGHTBOWN.—On the 18th inst., at the Pendleton Congregational Church, Manchester, by the Rev. E. Walker, Henry A. G. Brooke, M.B., B.A., to Sara, fourth daughter of Henry Lightbown, J.P., of The Willows, Weaste.

CULLING—TOWNSEND.—On the 23rd inst., by licence, at St. Mary's, Ealing, Middlesex, William Robert, L.S.A.L., eldest son of the late Robert Culling, Surgeon, of West Lydiard, near Somerton, Somerset, to Jessie, third daughter of the late Arthur Townsend, Esq., of the County of Essex.

FOWLER—WATSON.—On the 18th inst., at St. James's, Piccadilly, by the Rev. J. Dyer Tovey, M.A., Robert Fowler, M.D., of 12, Old Burlington-street, W., and of Bishopsgate, E.C., to Judith, second daughter of the late John Watson, formerly of Rosenheim, Westhill, Putney-heath, and 74, Lower Thames-street. No cards.

STACPOOLE—MCBAIN.—At Cromwell, Otago, New Zealand, by the Rev. B. Drake, Charles A. Stacpoole, Surgeon, to Joanna, youngest daughter of the late John McBain, of Melbourne.

DEATHS.

DITCHETT.—On the 10th inst., at his residence, Upgate, Louth, Lincolnshire, W. D. Ditchett, J.P., M.R.C.S.E., in his 78th year.

MILLER.—On the 10th inst., at Newport, Isle of Wight, Margaret Booth, the beloved wife of C. M. Miller, M.D., of Shire House, Sheffield, Medical Officer of Health for Carisbrooke.

PUGHE.—At his residence, Catharine-street, J. E. Howard Pughe, M.R.C.S.E., son of the late Mr. J. Pughe, J.P., of Aberdovey, aged 35.

ROE.—In March last, at Cape Coast Castle, Charles Roe, L.R.C.S.I., aged 25.

WEBB.—On the 5th inst., from enteric fever, at Shrewsbury, John Rheece Wynn Webb, F.R.C.S.E., L.R.C.P.L., of Coln, St. Aldwyn's, Gloucestershire, aged 28.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

INTERNATIONAL MEDICAL CONGRESS.

LONDON, 1881.

SECTION VIII.—MENTAL DISEASES.

Dr. LOCKHART ROBERTSON, President.

Dr. CRICHTON BROWNE, LL.D., F.R.S.E., Dr. MAUDSLEY, } Vice-Presidents.

Dr. GASQUET, Dr. SAVAGE, } Secretaries.

Proposed List of Subjects for Discussion, subject to revision before 31st December, 1880.

ANATOMY.—1. Modes of Preparation of Nervous Tissue. 2. Morbid Appearances due to Modes of Preparation. 3. Minute Structure of Special Parts of Brain.

PHYSIOLOGY.—1. Relation of Cerebral Localisation to Mental Symptoms as Hallucinations. 2. Hypnotism.

PATHOLOGY.—1. Of Idiocy, Morphological and Histological Changes. 2. Relations of Insanity to Gout, Renal Disease, Exophthalmic Goitre, and to Coarse Brain Disease.

CLINICAL.—1. "Folie à double Forme." 2. Influence of Intercurrent Diseases on Insanity. 3. Insanity due to Toxic Agents.

THERAPEUTICAL.—1. Use of Baths, of Narcotics, of Chloral Hydrate, of Opium, and of Alcohol. 2. New and Unusual Remedies.

ASYLUM ADMINISTRATION.—1. Cottage and Village Treatment. 2. New Legal Codes. Austrian, Italian, English Projects.

CIVIL RELATIONS OF THE INSANE.—1. Marriage, Wills. 2. Insanity and Aphasia.

CRIMINAL RELATIONS OF THE INSANE.—Special Asylums for Insane Criminals.

LONDON, AUGUST 2ND TO 9TH, 1881.

SECTION III.—PATHOLOGY AND MORBID ANATOMY.

Dr. SAMUEL WILKS, F.R.S., President.

Dr. BRISTOWE, JONATHAN HUTCHINSON, Esq., Prof. SANDERS, M.D., F.R.S.E., Edinburgh, } Vice-Presidents.

Dr. PAYNE, MARCUS BECK, Esq., M.S., } Secretaries.

The following subjects are those proposed for discussion:—

I.—**The relations of minute organisms to certain specific diseases, such as Relapsing Fever, Ague, and Malignant Pustule (Anthrax).**

II.—**The relations of minute organisms to unhealthy processes arising in Wounds, and to Inflammation in general.**

III.—**Tubercle: 1. Its histological characters. 2. Its relation to inflammatory processes in different organs, such as the Lungs, Lymphatic Glands, Bones, and Joints.**

IV.—**The origin of Cancer and Sarcoma, and their relation to the Normal Tissues in which they arise.**

V.—**Diseases of the Kidneys: 1. The morbid histology of the different forms of Bright's Disease. 2. The relation of Renal Disease to disturbances of the general circulation, and to alterations in the Heart and Bloodvessels.**

VI.—**Recent Researches in the Morbid Anatomy of the Brain and Spinal Cord.**

It is proposed to hold exhibitions of microscopical specimens in illustration of each of these subjects, and, further, to afford opportunities for the demonstration of methods and instruments of research, in any of those in which it would be desirable.

In thus selecting certain special subjects for discussion, it is by no means intended to exclude from consideration other pathological topics.

All communications relating to this Section should be addressed to one of the Secretaries, whose addresses are given below, and abstracts of all papers intended to be read at the Congress should be sent in by April 30th, 1881, to be submitted for approval to the Executive Committee, and to be translated into German, French, or English.

JOSEPH FRANK PAYNE, M.D., 78, Wimpole-street, London, W., MARCUS BECK, 30, Wimpole-street, London, W., } Secretaries.

THE LANCET IN 1880.

At the commencement of the year 1880 THE LANCET *was permanently enlarged from* 72 *to* 80 *pages. Notwithstanding this increase of space, it has been necessary to give an average of more than* THREE EXTRA *pages each week during the year. The tale of our work, as shown by the* GENERAL INDEX, *which appears in the present number, now stands as follows:—We have devoted* 2080 *pages to the medical subjects of the year, giving* 238 *to the publication of clinical lectures,* 351 *to original articles by practising members of the profession,* 97 *to reports of hospital cases,* 54 *to reviews, and* 401 *pages to the Editorial discussion of matters of professional interest. Meanwhile the steadily and rapidly increasing demands on our public space have compelled us to appropriate* 2252 *pages to the use of advertisers. The projected increase of the year has been more than justified by the claims made upon* THE LANCET *as a medical newspaper. Some notion of the part this Journal has now assumed in the periodical literature of the profession may be gathered from the fact that during the year now closing we have printed no less than* 676 *letters from medical men, giving an average of* THIRTEEN *in each number. Some of our issues have contained upwards of a thousand advertisements, and it has been difficult to keep this section of the Journal within the limits thus indicated. One of the prominent features of our Editorial work during the year has been the development of an extended, and, as we believe, very efficient organisation for the notice of matters affecting the Public Health both at home and abroad. Medical Officers of Health and Sanitarians generally now find in* THE LANCET *an admirable section devoted to Sanitary Science, and a thoroughly effective channel for information and the publication of special news. Advertisers who have so signally shown their appreciation of the facilities offered by* THE LANCET *during the last year have been furnished with a special* INDEX OF ADVERTISEMENTS, *which has proved of great value both to those who announce their wares and wants and to those who seek the information advertisements supply. In the past year we have increased the size of particular numbers of the Journal as occasion required. For example, on the 8th of May and the 11th of September we issued numbers comprising* ONE HUNDRED AND FOUR PAGES *each. We shall pursue the same policy in* 1881 *which has been so successful in* 1880, *and, with a constantly growing circulation, we confidently hope to maintain the high position which the late Mr. Wakley, the founder of this Journal, claimed and asserted, for the trust we have received from his hands.*

Notes, Short Comments, and Answers to Correspondents.

One Aggrieved.—The recent Royal Warrant removed some of the grievances which, however much our correspondent may now decry them, were put prominently forward by the officers of the department. The Marquis of Ripon has promised an inquiry into the other causes of discontent which were brought under his consideration, and, pending that inquiry, we do not think the publication of our correspondent's remarks would tend to promote the interests of the service.

Mr. A. Morris.—It is possible to obtain clinical instruction in mental diseases at most of the public asylums; and in connexion with each school of medicine there is a lecturer on Psychological Medicine who provides the teaching required.

Lanus.—Could our correspondent favour us with another letter, and it shall receive attention?

A Bart.'s Student.—We are strongly of opinion that no one who is not a medical man should practise dentistry, the L.D.S. notwithstanding.

Mr. E. M. Holmes is thanked.

Enquirens, M.D., (Leeds.)—1. To a limited extent only. The water should be boiled immediately before using, and under no circumstances should more than the quantity required for a day's consumption be boiled at one time. Of course, except under circumstances where a pure water-supply can by no possibility be obtained, the use of water containing sewage would not be assented to by a medical man.—2. Fish contains a good deal of phosphorus; but, as a feeder of nerve-tissue, we hold it far inferior to butchers' meat.

Mr. M'Gill's paper will appear in an early number.

"NOTES ON THE PATHOLOGY OF DIABETIC URINE."

To the Editor of THE LANCET.

SIR,—Having read Dr. Cameron's Pathological Notes on Diabetic Urine in your impression of Nov. 13th, I beg leave to send you the following report of two specimens of urine, with some comments upon them, in the hope that they may be of interest:—

SPECIMEN 1.—Urine reddish-yellow, slightly turbid; slight flocculent deposit; specific gravity 1007; reaction acid. Contains sugar, and about one-fifth column of albumen. Microscopic examination shows numerous large granular casts, leucocytes, and squamous cells. Quantity of sugar, twenty-four grains per ounce.

SPECIMEN 2.—Urine yellow, turbid, thickish deposit; specific gravity 1009; reaction faintly acid. Contains about one-fourth column of albumen; no sugar.

Remarks.—Specimen 2 was the urine of a traveller, a gentleman who was known to be suffering from diabetes and albuminuria. Being under the impression that the sugar could not have disappeared entirely from his urine, I persevered, with every precaution necessary, to overcome the numerous fallacies generally met with in testing for glucose. Both Fehling's and Trommer's tests failed to reduce the copper, even when the test-tube was kept in hot water for some time, and even after having stood cooling some hours. With Moore's test, after several minutes' boiling, the colour of the urine was only inconsiderably increased. Not having been successful in the reduction of copper, I endeavoured to reduce trisnitrate of bismuth in carbonate-of-soda solution; but although only a very small quantity was used, the colour of the metal was not altered in the slightest degree. Imagining, therefore, that the reason of these tests not effecting the reduction of the metals must be owing to the sugar being present in very small quantities, and the other constituents approximating their normal standard, I resolved to try Seegen's test, whereby the urea, uric acid, &c., are removed from the urine by repeatedly filtering it through charcoal. This was followed by precisely the same results as the former experiments. An attempt was made to precipitate the uric acid by nitric acid, and after standing some time I filtered the precipitated albumen and uric acid, and applied Trommer's test to the filtrate. A few drops of the solution of copper were first added, and then liquor potassæ until the liquid was only faintly acid or neutral; then on applying heat for a short time, the red deposit which characterises sugar became apparent. Is this owing to the fact, as Dr. Schunck announced in the *Philosophical Magazine* (March, 1862), that healthy urine when boiled with acids gradually deposits a resinous substance, which acquires the power of reducing the oxide of copper? Or has the glucose been replaced by a substance called inosite, which is not capable of reducing copper, bismuth, or silver in an *alkaline* solution, and which is found in cases of diabetes and Bright's disease?

I thought these two specimens interesting, in addition to the above, as regards the low specific gravities. I suppose it is entirely depending upon the albumen being present, as in neither of the cases was water taken or passed in excessive quantities.—Yours obediently,

Birmingham, Nov. 1880. AUGUSTUS F. CLAY.

"SEAWEED AS A SUBSTITUTE FOR JAM."

IN reference to his note which appeared in our issue last week, *Mr. G. C. Karop* writes that he meant to say it is *not* the diatom, Arachnoidiscus japonicus, but the seaweed on which it grows, that is used for making jelly.

Mr. G. E. Carre.—The announcement appears on p. 998 of our last issue.

THE DISCUSSION ON "LISTERIAN OVARIOTOMY."

To the Editor of THE LANCET.

SIR,—There are several inaccuracies in the otherwise admirable report of the meeting of the Medico-Chirurgical Society, published in your last issue, that I should like to correct. The first occurs in the following: "He had not once to use the ice-cap in cases treated with this solution (one per cent.), and out of 29 cases *had lost eight*, two deaths being from shock." It should have been: "He had not once to use the ice-cap in the last 29 cases, and out of *seventy*-eight modified Listerian cases had lost eight," thus giving a mortality of 10·2 per cent., or, excluding the two deaths from shock, a mortality of only 7·8 per cent. The second consists in the substitution of Mr. Heath's name for that of Dr. Keith. The third was an error on my part—viz., in the reference to the statistics collected by Peruzzi. In the second hundred the proportions were the reverse of those of the first hundred—a result which Peruzzi attributes to the combined effects of Listerism and drainage. Yet as evidence that Listerism alone could not be said to have done very much for ovariotomy in Italy, which was my argument, there still appears a mortality of over 33 per cent., with this interesting fact, that in addition to septicæmia appearing several times in the list of deaths, we have a new cause figuring there—viz., that of carbolic poisoning.

Yours faithfully,

Granville-place, Dec. 20th, 1880. GEO. GRANVILLE BANTOCK.

DR. BARRY'S REPORTS.

WE are requested to state that Dr. Barry's Reports, which we noticed in our impression of Dec. 4th, are published by Mr. Nettle, of Settle.

Mr. Thomas Bell, (Uppingham.)—We cannot give a decisive reply until we see the MS.

Dr. Prior.—The paper is marked for insertion.

ON THE ASSOCIATION OF AFFECTIONS OF THE THROAT WITH ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I beg the favour of an opportunity to draw attention to the fact that, however lightly treated in text-books of general medicine, the connexion between tonsillar inflammations and the gouto-rheumatic diathesis has been insisted on by me, as many can testify, for upwards of ten years, and is dwelt upon at full length in my work on "The Throat and its Diseases," published in March, 1878.

Since this point was referred to by very many of my reviewers as novel, at least as to the extent that I carried the similarity of causes, symptoms, progress, and treatment of the two affections, I may assume that there was some originality in the suggestion, and that if so, I may lay claim to any credit attaching to its first publication. The fact that my book did not receive the honour of a review in your pages, perhaps justifies Dr. Fowler in thinking that he is breaking new ground in publishing his very interesting list of corroborative cases. For the same reason I claim a prominent place in your columns for this short statement of my position.

I would add that in my experience patients subject to tonsillitis are not often the victims of muscular or articular manifestations of the disease, provided the throat affection be treated by an eliminative, not by an abortive process. I therefore always commence treatment by an active purge, and combine sulphate of magnesia and potash salts with the salicylate of soda. Finally, in those few cases in which the rheumatic connexion is not clearly to be traced, and tonsillar inflammation is frequently recurring, an insanitary condition of dwelling-house, food, or vocation is generally at the root of the mischief.

Your obedient servant,

Weymouth-street, W., Dec. 1880. LENNOX BROWNE.

Dr. W. R. Smith, (Cheltenham.)—The paper will appear as early as our arrangements will permit.

Mr. Freeman. Thanks.

THE demands of the Summary and the Index will be a sufficient explanation to our readers of the postponement of notice of many subjects.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Sturges, London; Professor Rutherford, Edinburgh; Dr. Smart, Dowlais; Dr. N. Harris, London; Dr. Keir, Melksham; Mr. Kesteven, London; Dr. Foster, Leeds; Mr. Story, Linslade; Mr. Giles, jun., Staunton; Mr. Freeman; Mr. Hodges, Leicester; Dr. Savage, Birmingham; Dr. Dunlop, London; Mr. Treves, London; Mr. Stoker, Durham; Mr. Partridge, London; Mr. Rivington, London; Dr. Taylor, Liverpool; Mr. Bell, Uppingham; Dr. Hinds; Mr. Phillips, Southend; Dr. G. W. Balfour; Mr. Jones, Lewes; Dr. Lowndes, Egham; Mr. Reeves, London; Mr. Christy, London; Mr. Cookson, Stafford; Dr. Marshall, Conishead Priory; Mr. Cable, Greenwich; Mr. Paton, Greenock; Mr. Jackson, Wolverhampton; Dr. Christie, Glasgow; Dr. Dunlop, Jersey; Mr. Hooper, Newhall; Dr. Latham, Cambridge; Mr. Napper, Cranleigh; Mr. May, Tottenham; Dr. L. Down, London; Mr. Meredith, London; Mr. J. Mahomed, London; Mr. H. M. Ellis, Eastney; Dr. Waller, Edinburgh; Mr. Furneaux Jordan, Birmingham; Mr. Beal, London; Dr. O'Connor, London; Dr. Hoffmeister, Cowes; Mr. Whitefoord; Dr. Stephenson, Bradninch; Mr. Higgins, London; Dr. R. L. Johnson, London; Dr. Tripe, London; Dr. Cock, Ross; Dr. Thursfield, Shrewsbury; Dr. Bantock, London; Mr. Dolan, Halifax; Dr. Alexander, Bradford; Dr. Ross, Belfast; Mr. Vacher, Birkenhead; Mr. Barnish, Wigan; Mr. Tubs, Cheltenham; Mr. King, Leeds; Mr. Davis, Hereford; Mr. Smyth; Mrs. Grayling, Forest-hill; Mr. Saunder; Messrs. Clark and Co., York; Mr. Taylor; Dr. Tibbits, Bradford; Dr. Caskie, London; Dr. Budd, Clifton; Dr. Drummond, Newcastle-on-Tyne; Mr. Rendle, London; Mr. Greenway, Plymouth; Dr. Bakewell, Hokatika, N.Z.; Dr. Moore, Dublin; Mr. Davies, Shtrborne; Mr. Stewart, Barnsley; Dr. Lush, Fyfield; Dr. Allen Duke, Folkestone; Mr. L. Tait, Birmingham; Mr. Wilkinson; Mr. Prideaux, Wellington; H. J. F.; Lexus; E. B. D.; A Constant Subscriber; Fides; Surgeon-Major; Lecturer; Juvenal; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Miller, Newport; Mrs. Bromhead, Lincoln; Dr. Clark, Folkestone; Dr. Edge, Manchester; Mr. Gulliver, London; Dr. Waters, Liverpool; Mr. Harris, Hackney; Mr. Atkinson, Farnham; Miss Rimington, Nottingham; Mr. Spowncer, Gainsborough; Mr. Stelfox, Darwen; Mr. Collingwood, Corby; Mr. Tomson, Luton; Messrs. Sharp and Co., Newcastle-on-Tyne; Mr. M'Bain, Otago, New Zealand; Dr. Dickson, Buxton; Messrs. Maw, Son, and Thompson; A. B., Canterbury; A., Sheffield; E. J.; A. A. A.; Superintendent, Croydon; Medicus, Middlesbro'; Alpha, London; Alpha, Darwin; M. A., Claughton; W. S. S.; R. E., Llandovery; &c.

Science, Missouri Republican, Ormskirk Advertiser, Wigan Observer, Gaillard's Medical Journal, La Revista de Medici, Brighton Herald, Rangitikei Advocate, Freeman's Journal, Monmouthshire Beacon, &c., have been received.

INDEX.

A B C method of treating sewage, the, 304
Aberdeen Medico-Chirurgical Society, 876
—— University, 677
Absinthe, convulsions from, 627
Acland, Sir T. D., on hospitals, 472, 517; on hospital nursing, 517
Acne, dose and value of calcium sulphide in, 465, 495
Aconitine, 778
Adulteration, curiosities of, 690, 719
Advice and medicine for sixpence, 283
Afghan war, the, 30, 673
Afghanistan, list of medical officers serving in, 278; health of troops in, 398
Aikman, Dr. J., the chloroform death bill for twelve months, 835, 902
Aitken, Dr. W., obituary notice of, 796
Albert Medal, the, 1035
Alcohol, and hospitals, 59; in pneumonia, 681
Aldershot, inspection of the Army Hospital Corps at, 278; the medical officers' mess at, 673
Algeria, vital statistics of, 329
Allahabad, cholera at, 713
Allt, Mr. N. W., antiseptic midwifery, 641
Almeida, Dr. G. P., enteric fever in tropical climates, 358
Althaus, Dr. J., tarsal tumours treated by electrolysis, 767
American Gynecological Society, Transactions of the (review), 262
Amphlett, Mr. E., obituary notice of, 479
Anæmia, the blood in, 89, 235
Anæsthetics in 1651, 349; the administration of, 810
ANALYTICAL RECORDS. — Confection of fresh beefruit, 138—Hypophosphine, lb.—Mackey's quinquinine, lb.—Van Abbott's preparations for diabetics, &c., lb. — Allen and Hanburys' malted farinaceous food, lb. — Mistura bismuthi co. (Dr. Browning's), 220 — Mist. pepsinæ co. c. bismutho, lb. — Essence of dandelion coffee; Essence of coffee and chicory; The Edinburgh coffee and milk, lb. — Benger's preparations of the natural digestive ferments, lb.—McDougall's patent flour (self-raising), lb.—Duroleum (hard oil), 462—Baron Liebig's leguminous cocoa powder, lb. — Sparkling natural mineral water of Schlossbrunnen Gerolstein, 463 — Sparkling hygeia, lb.—Harzer water, lb.—Glenrosa: pure Highland malt whisky, lb. — Stearine paper, 983—Malted cocoa, lb. — Granular effervescent iodate of iron, lb.—Pilsener lager beer, lb. — Guaranteed pure soluble cocoa, lb.
Anatomy v. physiology in the education of the medical student, 859
Anderson, Dr. M'C., notes of a case of hystero-epilepsy, 297
——, Dr. T., new instrument for estimating astigmatism, 455
Anencephalous monster, 854
Aneurism, cases of, illustrating difficulty in diagnosis, and the use of Esmarch's bandage, 603, 695; aortic, case of, treated by galvano-puncture, 209; of the arch of the aorta, 694; of the ascending aorta, 735; of the left superficial femoral artery, ligature of the external iliac, hæmaturia, incision into the sac, secondary hæmorrhage, gangrene of toes, recovery, 200; popliteal, case of, 600; of the external carotid, in which, after failure of the ligature of the common carotid, the old operation was performed successfully, 695
Animal vaccination in Holland, 159
Ankle-joint, inward compound dislocation at the, with fracture, 895
Annus medicus 1880, 1022
Anthrax, 586, 965
Antiseptic spray-producer, a steam, 138
—— surgery, 51
Antiseptics, diffusion of, and other remedies in the atmosphere of apartments, 757
Anti-vaccinations, 990; statistics of, how they are made, 325, 995, 433
Antrum, suppuration of the, 172
Anus, artificial, suggested improvement in Dupuytren's operation for, 970
Aphasia following injury to the head, 851
Apoplexy from embolism, 855
Apothecaries Act, prosecutions under the, 63
—— Society, 684; the defence of the, 960; the licence of the, 990, 995
Archer, Mr. F. B., report of the first case of ovariotomy in Barbadoes, 330
Ardwick and Ancoats Dispensary, 36
Army coffee taverns, 707
—— medical service, 254, 604; the, report of the, 55, 115; warrant, 40
—— medical school, 231; athletic sports, 156
——, Navy, and Indian medical services, the examinations for, 232
Arnica, tincture of, poisoning by, 65
Artisans' Dwellings Act, 148, 787
Articular cartilage, 182
Ashby, Mr. H., hospital etiquette, 417
Asia Minor, famine in, 312
Aspirator, the, as an aid to diagnosis in obstruction of the bowel, 762; exploring, 382
Assistants, unqualified, and medical certificates, 741
Association of Registrars of the London Hospitals, 754
Asthma, treatment of, by the induced current, 761
Astigmatism, new instrument for estimating, 455
Astrological pathology, 64
Ataxic arthropathy, 733
Ataxy in several members of a family, 618
Athletics, 36; report on, 218
Atkinson, Dr. W. B., the Therapeutics of Gynecology and Obstetrics (review), 202
Atrophic paralysis, acute, in infants and adults, 923, 1007
Auditory vertigo, on, 535
Australia, infant mortality in, 808
Australian vital statistics, 911
Austrian navy, sanitary regulations of the, 97
Axillary artery, rupture of, during reduction of luxation of the humerus, diffuse traumatic aneurism, amputation at the shoulder-joint, death, 260
Ayres, Mr. J. W., doctors and death certificates, 641

Baber, Mr. E. C., report on one hundred cases of ear disease, 211
Baby-farming, 997
Backergunge gaol, 954
Bader, Mr. C., on sclerotomy, 298
Bailey, Mr. J., an ancient medical charity, 241
Baker, Mr. H. F., inflammatory affections of the joints in childhood, 360
Ball, Dr. W. M., strangulated congenital hernia in a child fourteen months old, operation, recovery, 575
——, Mr. J. B., easy expulsion of gall-stones, 522
—— Prof. B., hemianæsthesia by static electricity, 531
Ball's Astronomy (review), 944
Bancroft, Dr. J., duboisin, 33
Bantock, Dr. G. G., Neuber's bone drainage-tubes, 495; hyperpyrexia after Listerian ovariotomy, 976, 1042
Barker, Mr. A. E., treatment of genu valgum, 870; a suggested improvement in Dupuytren's operation for artificial anus, and a successful case treated by it, 970
Barlow, Dr. T., on rickets, 1018
—— Dr. W. H., provision for the relief of sufferers in railway accidents, 365
Barmouth, 589; as a health resort, 719
Barnes, Dr. R., on the diseases of women, 131, 923; Regina v. Ingle, the penal treatment of disease, 856
Barrow, Mr. A. B., treatment of hæmorrhoids by crushing, 74
Bartlett, Mr. T. H., introductory address by, 678
Barton, Mr. J. K., medical practice in New Zealand, 523
Barwell, Mr. R., on Aneurism, especially of the Thorax and Root of the Neck (review), 217
Bateman, Mr. H., obituary notice of, 874
Bath, small-pox in, 27, 788
Bathing, 206; cramp while, 509
Baxter, Dr. E. B., on rickets, 1017
Beale, Surgeon-Major, death of, 743
Beddoe, Dr., the address of, 633
Bed-dress, medical and surgical, 67, 202
Bedroom ventilation, 712
Belfast, an advertising hospital in, 534; workhouse, 475
Bell nuisance, the, 142
Bellamy, Mr. E., on a case of excision of the scapula, 889
Bengal medical retiring fund, 533
Benham, Mr. R. F., treatment of hæmorrhoids by crushing, 158, 395
Bennett, Dr. A. H., report of a case of aortic aneurism treated by galvano-puncture, 209
Benzoin, compound tincture of, treatment of compound fracture by, 9
Bequests &c., 36, 76, 117, 236, 363, 520, 560, 678, 701, 754, 796, 834, 876, 997, 1039
Berridge, Mr. W. A., abscess of the cerebellum, 576
Berry, Mr. W., notes of a case of lymphadenoma, 577
Bigelow's method of lithotrity, 4, 308
Biggs, Mr. R., Chian turpentine in cancer, 223; colour-blindness and railway employés, 643
Bile as a preservative, 798
Biliary calculi, on the use of olive oil in large doses for softening and causing the easy expulsion of, 456
Bird, Mr. T., administration of nitrous oxide gas, 78
Birds, blood formation in, 585
Birkenhead sewer accident, 907
Birmingham and Midland Eye Hospital, 225
Blackburn, registration of infectious diseases at, 27
Bladder, on the excision of obstruction at the neck of the, 32, 73, 113; supra-pubic puncture of the, 325, 400, 483; removal of villous growth from the, 989
Blanc, Dr. H., lithotapaxy in Bombay, 49
Blindness in connexion with pregnancy, 941
Blisters, the action of, on sensibility, 735
Blood-corpuscles, origin of, 179
Boarding-out system, the, 323
Bogus diplomas, 560
Bone drainage-tube, decalcified, 922
Bone-gouge, hoeing, 232
Bone-setting, 80
Bones, obscure pain in, after injury, 364
——, lengthening of, from disease of joints, 704
Books, on, 410
Booth as "Hamlet," 824
Boulton, Dr. P., on the physical development of children, or the bearing of anthropometry to hygiene, 610
Bourke, Mr. W., infant mortality, 38
Bournemouth, 513
Bowels, obstruction of the, caused by large worms, Amussat's operation, death, 893
Bowles, Dr. R. L., further observations on stertor, its pathology and treatment, 971, 1010
Boyce, Mr. C., chloral and morphia, 601
Boyd, Dr. R., the care and care of the insane, 934, 1013
Bradburn, Mr. J. D., the chloroform death bill in twelve months, 835
Bradbury, Dr. J. R., address in medicine, delivered at the meeting of the British Medical Association, 245
Bradford, Mr. C., work and pay in provident dispensaries, 400
Bradley, memorial fund, 677
Brailey, Dr. W. A., nitrous oxide as an anæsthetic in squint operations, 911
Brain disease, organic recovery from symptoms of, 657
Brazil, brief notes of a voyage to, 3, 83
Bread, whole-meal, 987
Breast, cystic adenoma of, 171
Brereton, Mr. J. B., presentation to, 481
——, Mr. P., obscure pain in bones after injury, 364
Bridgman, Mr. H. H., hot-air baths, 79
Brinckman, Mr. A., Guy's Hospital, 395
Brighouse, scarlet fever at, 69
Bristol Royal Infirmary Reports (review), 175
—— Workhouse, stimulants at the, 79
Bristowe, Dr. J. S., inaugural address at the Society of Medical Officers of Health, 658
British Medical Association meeting, 224, 274, 313, 367; surgery at the, 362; distribution of honours at, 507
—— Medical Temperance Association, 713, 757, 879
Broca, Prof. P., obituary notice of, 153
Brodhurst, Mr. B. E., treatment of genu valgum, 870
Bronchitis, complicated with diarrhœa, 963, 1004

Bronchus, passage of needle of hypodermic syringe into, expectorated during a paroxysm of coughing thirteen days afterwards, 208
Brown Institution, 875
——, Mr. A. G., a new standard of measurement for hearing-power by comparison with the sense of touch, 127
——, Mr. F. M., the treatment of compound fracture with compound tincture of benzoin, 9; drunkenness or apoplexy, 285
Browne, Dr. J. C., address delivered at the opening of the section of psychology at the meeting of the British Medical Association at Cambridge, 282
——, Mr. E. A., a modified inflator for the middle ear, 260
——, Mr. G. B., on the excision of obstruction at the neck of the bladder, 32
——, Mr. L., on the association of affections of the throat with acute rheumatism, 1042
Brown-Séquard, Dr., on cutaneous stimulation, 900
Brussels, a hint for visitors to, 225
Bryden, Surgeon-Major, obituary notice of, 915
Buchanan, Dr. G., excision of one lateral half of the tongue, present condition of the first patient, operated on in 1865, 650
Buckland, Mr. F., obituary notice of, 1038
Building materials, 680, 757, 837
Bumstead, Dr. F. J., the Pathology and Treatment of Venereal Diseases (review), 174
Buncombe, Mr., the case of, 225
Burdett, Mr. H. C., the dispute at Guy's Hospital, 199; the period and influence of infection, 566; Cottage Hospitals (review), 944
——, Mr. H. F., obituary notice of, 402
Burges, Surgeon W. A., death of, 340
Burley-in-Wharfedale, typhoid fever in, 744
Burnet, Dr. R. W., flatulent distension of the colon, 931
Burns, treatment of, 326
Bursa patellæ and bursa ligamentæ patellæ, chronic effusion into, communication between the two bursæ, 813
Butlin, Mr. H. T., on the relations of sarcoma to carcinoma, 294, 350, 497, 722, 801, 939; on medical education, 954
Butterine, 347
Buxton, Mr. A. St. C., poisoning by chloral hydrate, 404
Buzzard, Dr. T., on "tendon-reflex" as an aid to diagnosis in diseases of the spinal cord, 842, 884; on cases of acute atrophic paralysis in infants and adults, 923, 1007

Cab horses, weaked-back, 24
Cabul, 473
Cadaveric alkaloids, 510
Calf lymph, 795, 836
Calcutta, health of, 304, 838
Callus, formation of, 345
Calvert's carbolic-acid fumigator, 16
Cambridge as a medical school, 383
—— University, 678, 907, 1039
Cameron, Dr. C. A., notes on pathology of the urine, 766
Campbell, Dr. J. A., insanity, its treatment and prevention, 337, 372
Canada, bureau of public health in, 477
Canal Boats Act, the, 800
Cancer, treatment of, 367; internal, three cases illustrating the difficulties of recognising, 540; etiology of, 1012
Cancerous breasts, results of excision of, 782
Carbolic-acid poisoning, 697
—— hand-spray producer, new, 777
Carbonic oxide on animals, effects of, 905
Cardiac hernia, traumatic, 261
—— sounds, reduplication of, 772
Cardiff Infirmary, five years' surgical work in the, 432, 613, 698, 768, 928
Carey, Mr. E., infantile diarrhœa at Widnes, 681
Carpenter, Mr. R. H. S., dental surgeon, 856
Carriages, open, for hire, 25
Carter, Mr. R. B., Thomson's ametrometer, 91
Cascara bark v. digitalis, 763
"Castration" for hysteria, 888
Cataract, soft, in one eye, and a high degree of myopia in the other, 768
Cattle, diseased, from abroad, 260; plague, 876
Cavafy, Dr. J., on the education of the general practitioner, 571
Cavendish College, 308
Cayley's Croonian Lectures (review), 942
Cayman's oil in phthisis, 641
Cecil, Mr. R., obituary notice of, 939
Cemeteries, Lord Beaconsfield on, 29; of London, 690
Census Bill, the, 339
Centenarian, a, 1021
Cephalic temperatures, 903
Cerebellum, abscess of the, 370; tumour of, 772; necropsy, 893
Cerebral embolism, 666
—— lesions, thermal effects of, 93
Cerebro-spinal meningitis, death and autopsy, 612
"Cesspools, wasting," 859
Change as a mental restorative, 863
Charing-cross Hospital, 226
Charteris, Dr. M., clinical retrospect of a half-year's hospital work, 161, 480; Homburg, 394
Cheap dispensaries, 643
Chelsea Hospital for Women, 144
Chemical lung, a, 301, 359
Chemist, a prescribing, 986
Chemists and doctors, 868
Chevreul, M., 743
Chian turpentine in cancer, 33, 57, 92, 153, 194, 233, 535, 559, 595, 637, 674, 719, 825, 840, 884, 896, 945
Children, on the physical development of, or the bearing of anthropometry to hygiene, 619; the punishment of, 823; on the peritoneal tuberculosis of, 1008
Chinchona, cultivation of, in India, 780; compounds, on the anti-malarial action of the, 165, 219, 296
Chinese as patients, the, 433
—— opinion on Western medical practice, 623
Chloral hydrate, poisoning by, 404; and morphia, 623, 661; and opium, 641
Chlorodyne, alleged poisoning by, 980
Chloroform, deaths from, 551, 587; in twelve months, 729, 835, 879, 890, 982; watching the pulse during the administration of, 913
Cholera in Russia, reported, 304, 477; in India, 399; hypodermic injection of morphia in, 636, 714
Chorea, fatal, statistics of, 81, 177; in pregnancy, 854
Christ's Hospital, scarlet fever in, 905
Christy, Mr. T., Chian turpentine, 719; tonga, 921
Church Coppenhall, typhoid fever in, 609
Cicatrix, contracting, plastic operation for, 617
Citizenship in sanitary work, 671
City of Dublin Hospital, 197
Clark, Dr. S., urticaria, 485
Clarke, Mr. T. F., the treatment of hæmorrhoids, crushing v. clamp and cautery, 718
Clay, Mr. A. F., the pathology of diabetic urine, 1042
——, Mr. W. B., medical education, 905
——, Prof. J., notes on Chian turpentine, and its use in cancer, 533, 697, 955
Cleft palate, a new instrument for the introduction of stitches in operations for, and other deeply-seated localities, 139, 241, 478, 518
Cleanliness, sanitary condition of, 475
Coated pills, 523
Cockburn, Sir A., death of, 981
Coffee, tests for pure, 404
Coin swallowing, case of, 360
Cold bath, what is a? 606
Coldbath-fields prison, 116
Cold-catching, the rationale of, 741
Cold feet, 862
Coleman, Dr. O., infected milk, 879
College of Physicians, Ireland, 22, 629, 718, 875, 1039; Medical Society, 716
Collins, Mr. W. J., Pasteur's experiments with chicken-cholera, 913
Collum, Dr. R., infected milk, 879
Colon, ulceration of the, with hypertrophy and dilatation, 695; flatulent distension of the, 931
Colorado, medical legislation in, 680
Colour-blindness, 152, 183, 643, 681; its examination and prevalence, 7; and railway employés, 550; congenital, 891
Colours, the sense of, 510
"Combatants and non-combatants," 905
Compulsory medical examinations, 241
Conium in cancer, 558
Constantine, Mr. J., hot-air baths, 79
Consultants v. general practitioners, 325, 365
Contagious diseases, how they are spread, 239
Contract, v., 144; the medical aspect of freedom of, 325
Convalescent homes, 224
Convict service, medical department of the, 523
Convulsions, a rare cause of, 718
Cook, Dr. J. W., calf-lymph, 795
Coombe lying-in Hospital, 44
Coombs, Dr. C. P., perambulators, 242
Copper test-pellets for sugar, 87, 102
Coracoid process, fracture of the, 667
Cork, pauper lunatics in, 39
Cork-street Fever Hospital, the inquiry at, 98, 473, 504, 628, 676, 783
Cornea, dermoid tumours of the, 324
Corned beef, poisoning by, 323
Cornwall, outbreak of typhoid fever in, 672
Coroner, a medical, and a medical mimic, 305
Coroners, doctors, and death certificates, 428
Coroners' fees, 959
Costello, Dr. C. P., intestinal obstruction, 911
Cottage hospitals, 512
Coulson, Mr. W. J., a third series of cases of stone in the bladder treated by lithotrity and rapid evacuation of the fragments (Bigelow's method), 4
Courtenay, Mr. J. H., a few practical remarks on the treatment of tropical dysentery, 91
Cowell, Mr. G., on strangulated hernia, 881
Craigie, Mr. J. H., "dental surgeons," "surgeon-dentists," 836
Cranio-tabes, 814
Cremation or burial, 319
Cresswell, Mr. R., quarantine at St. Helena, 985
Cresswell, Mr. W. G., chronic gastric ulcer, with total absence of symptoms, perforation, peritonitis; death, 467
Crocker's urine case, 57
Croom, Dr. H., presentation to, 997
Cross-legged progression, owing to double hip anchylosis, 698, 1039
Cromer, the water supply of, 196
Crown jewel store, 777
Cruelty to women, 120, 199
Crustacean perception of light, 144
Cumming, Mr. G. W. H., treatment of scalp wounds, 158
Cunningham, Dr. D. J., The Dissector's Guide (review), 736
Curran, Dr. W., a puzzling case of cancer of the lung, 259; the infection of phthisis, 899
Customs' officers, health of the, 311
Cyprus, 157
Cysticercal embryos, 473
Cytisus laburnum, poisoning by, 201

Dale, Dr. W., Guy's Hospital, 831
Daly, Dr. F. H., fifteen cases of diphtheria, 708
Davies, Dr. W., blister treatment of acute rheumatism, 73
——, Mr. J. H., hydrophobia, 31
Day, Dr. W. H., paroxysmal or intermittent hæmaturia in a young child following supposed injury, 238; Headaches: their Nature, Causes, and Treatment (review), 391
Day's splint for hip disease, 354
Deaf, speech for the, 988
Deakin, Mr. S., decalcified bone drainage-tubes, 692
Death-certificates, 501
Deaths, uncertified causes of, 627, 668, 739
De la Motte, Mr. P. W., poisoning by cytisus laburnum, 201; chloral and morphia, 533; application of calomel dust in the treatment of pterygium, 922
Delefosse, Dr., Leçons Cliniques sur l'Uréthrotomie Interne faites à l'Ecole pratique de la Faculté de Médecine de Paris (review), 499
Delirium tremens patient, a night with a, 872
Demonomania, an epidemic of, 167
Dental surgeons, 700, 750, 795, 836, 878
Deptford Hospital, report of the medical superintendent of the, 187
De Renzy, Dr. A. C. C., cholera in India, 740
Dermatology in America, 386
Devonshire watering-place, a, 590
De Watteville, Mr. A., pathology of lead palsy, 44
Dextro-quinine, 364
Diabetes, through emotional disturbance, 54; case of, presenting peculiar features, 173; symmetrical neuralgia in, 708; the blood in, 733
Diagnosis wanted, 697, 924
Diamond, Mr. W. H., dog-bite and hydrophobia, 160
Diarrhœa, the weather and, 298; choleraic, treatment of, by the hypodermic injection of morphia, 593, 661; infants, 601, 637; summer, in 1880, 670
Dickinson, Dr. W. H., on rickets, 939
Digitoxum, improved regulating, 631
Diphtheria, 515; fifteen cases of, 708; at St. George's Hospital, 648, 698; its treatment, 690; and infected milk, 637
Diphtheritic membrane, nature of the, 389
Disinfectants, the action of, on sewage and the living organisms contained therein, 855
Dismore, Mr. H., chloral and morphia, 641
Dispensaries, cheap, an illustration of the system of, 600
Dissection, subjects for, 795
Dissection-room, a private, 144
Dorin, the case of, 876
Diver, Dr. E., record of a night with the charge of a delirium-tremens patient, 872
Doctoring, cheap, 664
Doctors and death certificates, 641
Dods, Mr. G., the chloroform death-bill for twelve months, 920
Donkin, Dr. H., introductory address by, at Westminster Hospital, 543
Dowse, Mr. E., extracting teeth and putting them back into the jaw, 288; change as a mental restorative, 863; premature labour induced by quinine, 616
Dropsy, acute cancrous, 934
Drowning, safety from, 38
Drugs, recent investigations on the action of, 176, 543
Drummond, Dr. D., Cascara bark v. digitalis, 763
Drunkenness or apoplexy, 285
Drury, Dr. E., Chian turpentine in cancer, 33
Dry ash and earth closets in rural districts, 351
Dryedale, Dr. C. R., the Dublin death-rate, 77
Dublin, health of, 23, 52, 71, 112, 140, 196, 228, 273, 311, 352, 393, 470, 516, 553, 590, 632, 670, 712, 746, 790, 833, 867, 916, 949, 993; death-rate of, 77; sewerage of, 29; small-pox in, 110; scavenging in, 353; hospital Sunday in, 826

Dublin Cow-pock Institution, 273
—— Orthopædic Hospital, 117
—— University, 76, 707, 1039
Dublonin, 33
Duckworth, Dr. D., teaching and examinations at the Edinburgh University, 115
Duffin, Dr. A. B., teaching and examinations at the Edinburgh University, 114
Duke, Dr. A., extracting teeth and putting them back into the jaw, 39
——, Mr. B., calf lymph, 836
Dukes, Dr. C., endocarditis from very slight rheumatism, 376
Dunoan, Dr. J. M., on the treatment of puerperal fever, 663, 721
Dundee, scarlet fever in, 866
Duodenum, fatal ulceration of the, produced through scalding by hot water, used as a hæmostatic, 298
Durham University, 308, 677, 997
Dustbins, foul, 563
Dusting in London, 631, 710
Dysentery, treatment of tropical, 91

Ear, disease of the, report of 100 cases of, 211; removal of foreign bodies from the, 794; middle, modified inflator for the, 260
Earlswood Asylum, 186
Early rising, 599
East-course Convalescent Home, 803
East London Hospital for Children, 640
—— wind, the, in respect to health, 756
Eastwood, Mr I., treatment of choleraic diarrhœa by the hypodermic injection of morphia, 681
Eaton v. Baker, 899
Edinburgh, graduation day at, 233; the coming session at, 885; on the compulsory intimation of infectious diseases in, 740
—— Royal Infirmary, the new, 395, 463
—— University, teaching and examinations at, 61, 114, 155; address at the opening of the anatomical department in the new buildings of the, 734, 789; Graduates' club, 238, 781
Edmonton, a sanitary spasm in, 553
Edmunds, Dr. J., the late Miss Neilson
Education, the forcing system in, 787
Edwards's London Smoke and Fog (review), 944
Egypt, the general board of health of, 555
Elbow, treatment of fractures at the, 786
Electricians, congress of, 706
Electrolysis, tarsal tumours treated by, 767
Elemental pathology, 603, 645
Elephantiasis of leg, treated by elastic bandaging, 619
Elliott, Mr. C. B., typhoid fever, 74
——, Mr. H., case of poisoning by paraffine, 730
Empyema, double, treated by excision and aspiration; recovery, 617
Emrys-Jones, Dr. A., rupture of the eyeball in a patient suffering from hæmorrhagic diathesis, 949
Endocarditis from very slight rheumatism, 376; fatal, 398
Engadine, the climate of the, 46
Enteric fever in tropical climates 202, 358, 405
Enterotomy tube, a new, 763
Entries at the medical schools, 661
Epidemiology in the laboratory, 94
Epilepsy, treated by trephining, 619; lapsed or lost, 719
Epileptic hemiplegia and aphasia, left-sided; recovery, 730
Epistaxis, recurrent, 616
Epsom College, 167
Ercolani, Prof., the Utricular Glands of the Uterus, &c. (review), 490
Erskine, Dr. J. L., cases of rubeola, 452
Erythema, persistent, 816
Erythrophleine, 24
Esmarch's elastic bandage, danger of, 61
Ether administration, sudden death during, 378
Eucalyptus, oil of, 287
European cities, rates of mortality in, 671
Ewald's Lectures on Digestion (review), 630
Ewart, Mr. J. H., hospital etiquette, 479
Examinations and the examining bodies, 683
Exeter Congress, the, 554
Exostoses, multiple, 733
Explosions, 98
Extra-uterine fœtation, 14; simulating obstruction of the bowels, 170; a fifth case of, treated by abdominal section, 456
Eye, cases of injury to the, 131
Eyeball, rupture of the, in a patient suffering from hæmorrhagic diathesis, 949; congenital absence of one, 991

Face, the cortical centre for movements of the, 550; severe laceration of, 618
Facial nerve, stretching of, for the relief of spasm of facial muscles, 814
Factory and Workshops Act, 156
Fagge, Dr. J. H., an address preliminary to the discussion on rickets, delivered before the Pathological Society of London, 607
Fainting in church, 24
Fairbank, Dr. T. B., harelip trocar and tube, 601
Famine and death, 112
Farquharson, Dr. R., the Vaccination Acts, 116
Farr testimonial fund, 220, 396, 715
Fasting, protracted enforced, 677
Faulds, Mr. H., application of calomel dust in the treatment of pterygium, 836
Fayrer, Sir J., On Preservation of Health in India (review), 262; presidential address at the Epidemiological Society, 772
Feeding to live, and living to feed, 398
Feet, proper covering for the, 679
Female drunkenness, 708
Femur, dislocation of the, into the sciatic notch in a man seventy-two years old, reduction seventy-two days after the injury, 130
Fendick, Mr. T. R., passage of a fish bone from mouth to anus without causing injury, 239
Fenwick, Dr. S., On Atrophy of the Stomach and the Nervous Affections of the Digestive Organs (review), 659
Fergus, Dr. W., the use of pure water in erecting buildings, 601; diffusion of antiseptics and other remedies in the atmosphere of apartments, 757
Fever, constant bath treatment of, 399
Filaria disease, 792
Finch, Mr. H., treatment of hæmophilia, 556
Fingers v. knives and forks, 239
Fish-bone, passage of a, from mouth to anus without causing injury, 239
Fish-eating and leprosy, 747, 678, 922
Fistula, 936
Fitzgerald, Mr. E. A., a harelip trocar and tube, 819
Fleming, Mr. G., human and animal variolæ: a study in comparative pathology, 374, 453
Fish food, dietetic value of, 717; v. cattle disease, 278
Flood, Mr. A., presentation to, 227
Flushing pan, a, 16
Fogs, 665, 679, 940; prevention of, 825
Foot, dislocation of the, backwards from a bicycle accident, reduction, recovery, 576
Foot-and-mouth disease, 911
Football accidents, 1034
Forbes, Dr. L., a hint for visitors to Brussels, 325
Forceps, midwifery, rotatory action of the, 773
Forearms, extensive laceration of both, with fracture of the bones, recovery, 937
Foreign bodies swallowed by children, 193
—— employers, liability of, 141
Foster, Dr. M., Address in Physiology, delivered at the meeting of the British Medical Association at Cambridge, 287, 306
Fothergill, Dr. J. M., the Practitioner's Handbook of Treatment (review), 566
Fowler, Dr. J. K., on the association of affections of the throat with acute rheumatism, 933
Fox, Dr. H. C., transverse furrows in the nails, 40
——, Dr. T. C., fish-eating and leprosy, 678
Fracture, cases of, 172
Fractures, fat embolism in, 47
France, compulsory vaccination in, 71; public medicine in, 312
French Academy, the, 270
—— naval medical service, 354
Friendly Societies, medical attendance and, 786
Frost, Mr. W. A., colour-blindness and railway employés, 681
Furlong, Mr. N., new instrument for cleft palate, 478

Gairdner, Dr. W. T., hospital statistics of alcoholic stimulation, 115
Galactocèle, incision, cure, 860
Gale, Mr. H. S., the dispute at Guy's, 182
Gall-stones, discharge of, through the abdominal wall, 208; easy expulsion of, 532
Gamgee, Dr. A., a Text-book of the Physiological Chemistry of the Animal Body (review), 700
——, Mr. S., on the essentials of wound treatment, 507; extraction of a revolver bullet from the skull, 538, 574
Garlick, Dr. G., on the peritoneal tuberculosis of children, 1008
Garrard, Mr. G. S., scurvy in civil practice, 118
Gas, explosions of, 64, 960
Gastric ulcer, chronic, with total absence of symptoms, perforation, peritonitis, death, 457
Gay, Mr. J., sleeping girls, 31
Gee, Dr. S., on large heads in children, 449
General Lying-in Hospital, 948
—— Medical Council, the, meeting of, 18, 66, 94, 149; and medical legislation, 94; session of, 66, 101, 192; Crown appointments to the, 960
—— practitioner, on the education of the, 671
Genu valgum, 172; nature and treatment of, 770, 818, 870, 907
German Pharmacopœia, the, 678
Giant cells, pigment in, 824
Gibbes, Dr. H., Practical Histology and Pathology (review), 776
Gill, Dr. J., Chian turpentine in cancer, 152
Gladstone, Mr., health of, 223
Glanders, 189
Glasgow Medico-Chirurgical Society, 571
—— Southern Medical Society, 622
—— University, 231
Glycerine in flatulence, acidity, and pyrosis, 6
Glycosuria, pathology of, 663
Godlee, Mr. R. J., the arrest of hæmorrhage during amputation at the hip-joint, 33; an Atlas of Human Anatomy (review), 660; two cases of fracture of the skull, in one of which trephining was followed by complete recovery, 878
Goodsell, Dr. W., Lessons in Gynæcology (review), 217
Goodsve, Dr. E., obituary notice of, 752; memorial fund, 907
Gordon, Dr. C. A., on enteric fever in tropical climates, 203; fever in Mayo, 299
Gould, Mr. A. P., on the radical cure of varicocele by the galvanic écraseur, 63
Gouley, Dr. J. W. S., the excision of obstruction at the neck of the bladder, 113
Gout, on irregular, with remarks on the pathology of gout, 494
Government, the, and half diplomas, 946
Gowers, Dr. W. R., a note on an outbreak of rubeola (rötheln), 169; the diagnosis of diseases of the spinal cord, 461
Gramshaw, Dr. J. H., the use of impure materials in erecting buildings, 630
Granville, Dr. J. M., a plea for the classification and detailed study of mental and sensory causes, or forms, of sleeplessness, 333; a note on intention in the determination of sex, and the mental and physical inheritance of children, 659, 798, 1006
Grant College Medical Society, 64
Grattan, Mr. N., a method of more effectually securing Sayre's jacket after it has been cut, 811
Gray, Mr. F. A., tranmatic tetanus treated by chloroform inhalation, recovery, 171
Gray's Anatomy (review), 660
Greek, the requirements of, in Cambridge University, 742
Greenfield, Dr. W. S., lectures on some recent investigations into the pathology of infective and contagious diseases, 4; further investigations on anthrax and allied diseases in man and animals, 945
Grégory, Dr. W., De la Méthode Sanguine dans les Rétrécissements de l'Urèthre (review), 174
Grocers' licence, the, 96
Gross, Dr. S. W., a Practical Treatise on Tumours of the Mammary Gland (review), 856
Groves, Mr. H. J. F., diphtheria, 518
Guards' Warrant, the, 945
Gubler, Dr. A., Cours de Thérapeutique, professé à la Faculté de Médecine (review), 380
Guildford, sewerage of, 991
Günther's Study of Fishes (review), 1020
Guttmann, Dr. E., the Watering-places and Mineral Springs of Germany, Austria, and Switzerland (review), 16
Guy's Hospital, the dispute at, 25, 32, 73, 150, 153, 180, 193, 222, 265, 345, 357, 404, 507, 544, 564, 633, 640, 663, 680, 702, 714, 718, 796, 819, 831, 872, 878, 913, 962, 966, 993; the nursing at, 663, manifesto of governors of, 593
Gwynn, Mr. S. B., obituary notice of, 195
Gwynne, Dr. C. N., introductory address by, 879

Hæmatocele, of the tunica vaginalis, 299; encysted, incision, recovery, ib.
Hæmaturia, paroxysmal or intermittent in a young child following supposed injury, 336
Hæmophilia, treatment of, 7, 556
Hæmoptysis, parasitical, 548
Hæmorrhagic diathesis, hæmorrhage from the mouth, death, 377
Hæmorrhoids, treatment of, by crushing, 1, 74, 138, 718, 853
Half-cutters, 544
Half-year's hospital work, clinical retrospect of a, 101, 490
Hall, Dr. F. de H., the drainage-tube in pleuritic effusion, 797
Hall's patent ventilator and chimney cowl, 463
Ham, diseased, supposed poisoning by, 61; and herrings, poisoned, 349
Hamilton, Dr. F. H., Fracture of the Patella, a Study of 127 Cases (review), 559
Hand, restoration of the, after complete separation from the arm, 186
Hannah, Surgeon-Major, the late, 667
Hannan, Brigade Surgeon, death of, 151
Harding, Dr. C. F., the dispute at Guy's, 73
Hardman, Mr. W., extracting teeth and putting them back into the jaw, 78; treatment of choleraic diarrhœa by the hypodermic injection of morphia, 714, 538
Harelip trocar and cannula, 530, 601
Harkness, Mr. R., the late, 1039
Harrison, Mr. J., obituary notice of, 34
——, Mr. R., the immediate treatment of stricture of the urethra, 595
Hartley, Mr. R., a case of sudden death during ether administration, 376

Hars mountains, the health resorts of the, 637
Hastings, the starvation case at, 268
Haward, Mr. W., on rickets, 938
Haynes, Dr. S., case of labour with albuminuria, 50
Health of large English towns, 28, 70, 111, 149, 189, 237, 272, 310, 353, 392, 473, 513, 553, 590, 631, 670, 712, 745, 789, 832, 866, 910, 953, 991
——— of large Scotch towns, 28, 70, 111, 149, 189, 237, 272, 310, 353, 393, 473, 514, 553, 590, 632, 670, 712, 745, 790, 832, 867, 910, 953, 991
Hearing-power, a new standard of measurement for, by comparison with the sense of touch, 127
Hearne, Dr. E., obituary notice of, 752
Heart, the effect on the, by preceding infibulation, 65; disease of the, 133; action of the, 509; malformation of the, 530; cause of the first sound of the, 546; malformation of, and abscess of brain, 708; congenital malformation of the, 813; on the various forms of congenital disease of the, 846, 889
Heath, Mr. C., treatment of stricture, 516; on medical education, 955
Hebra, Prof. Dr. F. R. v., obituary notice of, 361
Hehner, Mr. O., Alcohol Tables, founded on the Tables of Fownes and Drinkwater (review), 542
Hemianæsthesia by static electricity, 531
Hemiatrophia facialis, 734
Hemin, note on, 800
Hemiplegia, right, after scarlatina, 393; left, with aphasia, 979; paralysis of cranial nerves with, 993
Hemlock, the alkaloids of, 778
Herbalist's surgery, 1035
Hereford sanitary combination, 189, 310
Hernia, strangulated femoral, operation without opening sac, rapid recovery, 400; strangulated congenital in a child fourteen months old, operation, recovery, 875; omental, two operations, recovery, 576; strangulated, on, 862; strangulated femoral in an insane patient, 948
Hernia, strangulated inguinal, 974
Herts Convalescent Home, 668
Hickinbotham, Mr. J., Chian turpentine in the treatment of cancer, 895, 974
Higgins, Mr. G. H., a note on intention in the determination of sex and of the mental and physical inheritance of children, 837
High-heeled boots and shoes, 963
Hill, Dr. H. W., leprosy, 779
Hip, disease of the, plaster-of-Paris bandages in, 92; excision of the, 171; disease of the, following ostetis of femur, 853
Hip-joint, arrest of hæmorrhage during amputation at the, 32; dislocation of the, 655
Hips, congenital dislocation of both, 772
Hirschfeld, Dr. J. C., obituary notice of, 480
Holden testimonial, the, 567
Holidays, the need of, 306
Holloway murder, the, 118
Holmes, Mr. T., address in surgery, delivered at the meeting of the British Medical Association at Cambridge, 251
Holt, Mr. R., the immediate treatment of stricture of the urethra, 478, 516
Homburg, 284
Home hospitals, 23
Homœopathic congress, the, 472
——— practitioners, 705, 757
Hopgood, Mr. T., obituary notice of, 733
Horder, Mr. J. G., temperature in rubeola, 961
Hospital bed-cards, 405
——— etiquette, 473, 617
——— Saturday, 396
——— Sunday fund, 65, 143, 186, 534, 903; and the Eastbourne Convalescent Home, 780, 986; origin of, 629; in Cumberland, 668
Hospitals, registration of disease in, 21, 30, 78, 119, 548, 628, 635; stimulants in, 116; diet in, 509; without committees, 547; functions of governors, medical officers, and nurses of, 737; payment of medical officers of, 766; unsectarian administration of, 83
Hot-air baths, 79; ventilation of, 201
Howard medal, the, 112
Howlett, Mr. E. H., registration of disease in hospitals, 30
Hoystead, Mr. J., use of alcohol in pneumonia, 631
Hudson, Dr. A., obituary notice of, 674; the late, 905
Hughes, Dr. T., cases in surgery, 974
Humerus, compound comminuted fraction of the, Listerism, recovery, 768; fracture of the inner condyle of the, perfect union, 769
Humphry, Dr. G. M., presidential address, delivered at the meeting of the British Medical Association at Cambridge, 243
Hunter, Dr. J. D., woolsorters' fate, 999
Hunt, Dr. J. P., enteric fever in tropical climates: milk treatment, 405
——— Dr. J. W., on the blood in anæmia, 89
Hunterian Museum, 24
Husband, Mr. H. A., the case of Swaziland, 272; medical education, 996
Hutchinson, Dr. J. C., Contributions to Orthopædic Surgery (review), 261
——— Mr. J., fish-eating and leprosy, 747; on rickets, 1015
Hydatid membrane, repeated expectoration of, no physical signs of hydatid disease either in the chest or abdomen, 10
Hydatids, of liver, ascites, multiple abscesses, death, 11; of right lung, obstinate dry cough, formation of white fibrinous clot in heart, death, ib.; treated by abdominal section and drainage, 976
Hydrocele, 663
Hydrocephalus, 854
Hydrochinon, 778
Hydrochloric acid poisoning, perforation of stomach in a case of, 996
Hydro-encephaloccle, 894
Hydrophobia, 31, 67, 160, 183, 402, 506; five years after inoculation, 734; and rabies, diagnosis of, 33
Hygiene, the third International Congress of, 823; for India, a manual of, 347
Hyoscyamine, 54, 778
Hysterical (so-called) eruptions of the skin, simulated, 239
Hystero-epilepsy, case of, 207; an epidemic of, 694

Ibbotson, Mr. E., All Saints Convalescent Hospital and the Hospital Sunday Fund, 956
Ice in the country, 307
Ichthyosis, 510
Ignipedites, 403
Ikin, Mr. J. I., risk of attending infectious cases, 38
Iliac abscess treated antiseptically, cure, 974
Ilott, Mr. E., quinine in acute rheumatism, 39
Imbeciles in garrets and cellars, 986
Imray, Dr. J., obituary notice of, 550
Incurable disease, 21
Index-catalogue of the Library of the Surgeon-General's Office, United States Army (review), 817, 519
India, the continued fevers of, 63; famine in, 191; enteric fever in, 194, 557; medical colleges in, 225; medical officers for, 323; hospital administration in, 307, 822; sanitary commissionership of, 353; station hospitals in, 387; vaccination in, 394; manual of hygiene for, 563; libel case in, 740; cholera in, 745; preventable disease and sanitary work in, 784; cholera and water-supply, 878
Indian gaols, health of, 591
——— medical service, 72, 200, 278, 284, 460, 545, 642
——— medico-sanitary news, 150
——— pensions, 319, 703, 861, 869, 945
Infant mortality, 38
Infants, infectious diseases of, 350
Infection, 589; prevention of spread of, 228; period and influence of, 696; the arrest of, 744, 789
Infectious cases, risk of attending, 38; medical ethics and, 30
——— diseases, registration of, 128; the control of, 351; hospitals for, 512, 589, 671, 710; compulsory notification of, 827, 865, 909, 952
Infective and contagious diseases, the pathology of, 41
Inflammable tissues, 667
Inflation, antiseptic, 668
Ingle, Dr. R. N., Guy's Hospital, 235
Inglis, Mr. T., two cases of myxœdema, 496
Insane, the cure and care of the, 984, 1013; paupers, certification of, 679, 719, 756
Insanity, its treatment and prevention, 537, 572
Insensibility from various causes, on the intercdiagnosis of, 881
Intention in the determination of sex, and the mental and physical inheritance, of children, 650, 757, 798, 857, 877, 928, 1005
International Medical Congress, the, 60, 112, 153, 180, 679, 755, 1041; women at the, 470
——— Red Cross Hospital, Baden, the, 353
Intestinal obstruction, 636; by hernia, through mesentery of a Meckel's diverticulum, 697; from contraction and ileal mucous membrane, 961
Intra-cranial hæmorrhage, profuse intense headache, vomiting, delirium, absence of hemiplegia, coma, glycosuria, death, 460
Intraocular hæmorrhage, primary, 775
Introductories, the, 583; the provincial, 625
Indican, the excretion of, 904
IRELAND.—The Queen's University, 586, 906.—Queen's College, Cork, ib.—Kilmainham Small-pox Hospital, ib.—Examinations at the College of Surgeons, 748.—The Introductories, ib.—New regulations as to lectures at the colleges, 750.—Salaries of medical officers of health, ib.—An idle scare, ib.—Student entries, 914.—Dublin Obstetrical Society, ib.—Belfast Royal Hospital, ib.—Representation of obstetrics in the General Council, ib.
Ireland, fever in, 69, 148, 207, 512; report of the Local Government Board of, 148; lunacy in, 200; the distress in, 512
Iris, nodular growth on, 775
Irish dispensary doctor, a, 1005
——— fever cases, 90, 191
——— Graduates' Association and Dr. Macnaughton Jones, 701
Irish town districts, health of, 71
——— university education, 473
——— workhouses, lunatics in, 229
Irvine, Dr. J. P., obituary notice of, 676
Islington workhouse, 529

Jaborin, 779
Jackson, Dr. J. H., on auditory vertigo, 525; eye symptoms in locomotor ataxy, 908
Jacob, Dr. E. H., the chloroform death-bill for twelve months, 799, 879
Jamaica, medical practice in, 948
Japan, English surgery in, 349
Jaw, lower, and floor of the mouth, extensive epithelioma of the, removal, satisfactory state two years after, 812
Jeaffreson, Mr. G. E., leather straps v. bandages, 369
Jeffries, Dr. B. J., colour-blindness, its examination and prevalence, 7; congenital colour-blindness incurable, 891
Jenner, Sir W., on rickets, 939
Jennings, Dr. O., music as a therapeutic agent, 794
Johnson, Dr. G., address by, at King's College, 558
Joints, the treatment of chronic inflammatory affections of the, in childhood, with especial reference to excision, 167, 200
Jones, Dr. M., and the Cork Fever Hospital, 596
———, Dr. W. P., infected milk, 879
———, Mr. O'B., the case of, 522
———, Mr. S., passage of needle of hypodermic syringe into bronchus, expectorated during a paroxysm of coughing thirteen days afterwards, 288
Jordan, Mr. F., Surgical Enquiries, including the Hastings Essay on Shock, the Treatment of Surgical Inflammations, and numerous Clinical Lectures (review), 963
Joy, Mr. W., obituary notice of, 34
Judge, the new, 786
Jury of unqualified assistants, a, 906

Kandahar, medical officers at, 477; despatches, 735, 869
Kanturk, the newsrage of, 852
Karop, Mr. G. C., seaweed as a substitute for jam, 1004
Kelly, Mr. M. D., tubercular deposits in the bowels and peritoneum, 643
Kelly, Mr. A. B., urticaria, 495
Kennedy, Dr. H., treatment of cancer, 397
———, Dr. R., on the use of olive oil in large doses for softening and causing the easy expulsion of biliary calculi, 456
Kenyon, Mr. J. E., Chian turpentine in cancer, 87, 675
Kerswill, Mr. J. B., blindness in connection with pregnancy, 241
Kesteven, Mr. L., infantile diarrhœa in New Zealand, 457
———, Mr. W. H., medical ethics and infectious diseases, 39
Kerr, Dr. A. T., the compound sphygmograph, 50
Kilmainham, the small-pox hospital at, 135, 236, 676
King's College, distribution of prizes, 397
Kingzett, Mr. C. T., the influence of peroxide of hydrogen on fermentation, 485
Kirby, Dr. E. A., nutricine, 1006
Kirkpatrick, Dr. J., fish-eating and leprosy, 922
Klein and Smith's Atlas of Histology (review), 50, 775
Knee-joint, a new method of excising the, 32; chronic synovitis of, aspiration of joint, 376; acute suppuration of, aspiration, ib.; contused wound of, suppuration, recovery, 379; disease of the, excision, recovery, ib.; puncture wound of, successfully treated with cold affusion, 797; complete lateral dislocation of the, 974
Kolpo-cystotomy by galvano-cautery, 64
Kuram force, medical officers serving with the, 675

Labour with albuminuria, 50; natural, management of, 668
Lacrymal obstruction, note on the use of large probes in the treatment of, 170
Laing, Mr. W. A. G., preliminary education, 413
Lameness, an unusual case of, operation, cure, 340
LANCET (THE) Commissions: On the Medical Use of Wines.—2, White Burgundy wines, 17; 3, Red Bordeaux wines, 145; 4, Red Burgundy wines, 660.—On Workhouse Infirmaries: Liverpool, 194.—On Athletics, 218
Lane, Mr. J. R., treatment of stricture, 517
Large heads in children, 449
Larkin, Mr. F. G., the dispute at Guy's, 30
Larynx, a piece of bread in the, treatment, asphyxia, tracheotomy, recovery, 576
Lawrence, Mr. H. G., medical and surgical bedcheck, 302; infantile rickets, 536
Lawrie, Dr. R., gunshot wound of the median nerve, 576

Lawson, Mr. G., Diseases and Injuries of the Eye (review), 701
Leather straps v. bandages, 280

LECTURES, ETC.

BARNES, Dr. R.:—
Clinical Lectures on the Diseases of Women.
Lecture III., 131
Lecture IV., 221

BRADBURY, Dr. J. B.:
Address in Medicine (Abstract of the), delivered at the Meeting of the British Medical Association on Aug. 11th, 1880, 245

BROWNE, Dr. J. C.:
Address (Abstract of an), delivered at the Opening of the Section of Psychology, at the Meeting of the British Medical Association at Cambridge, August, 1880, 292

BUDLIN, Mr. H. T.:
Lectures on the Relations of Sarcoma to Carcinoma. Delivered at the Royal College of Surgeons in June, 1880.
Lecture I., 204, 239
Lecture II., 467, 528
Lecture III., 601, 639

BUZZARD, Dr. T.:
Clinical Lecture (Substance of a) on Cases of Acute Atrophic Paralysis in Infants and Adults (Acute Anterior Poliomyelitis).
Lecture I., 925
Lecture II., 1007

CAVAFY, Dr. J.:
Introductory Lecture (Abstract of) on the Education of the General Practitioner. Delivered at St. George's Hospital, Oct. 1st, 1880, 671

CHAMBERS, Dr. M.:
Clinical Retrospect of a Half-year's Hospital Work, 161, 230

COWELL, Mr. G.:
Clinical Lecture on a Case of Strangulated Hernia. Delivered at Westminster Hospital, 862

DUNCAN, Dr. J. M.:
An Address on the Treatment of Puerperal Fever. Delivered before the Midland Medical Society at Birmingham, October 26th, 1880, 685, 721

FOSTER, Dr. M.:
Address in Physiology, delivered at the Meeting of the British Medical Association at Cambridge, on Aug. 13th, 1880, 287

GAMGEE, Mr. S.:
Clinical Lecture on the Essentials of Wound Treatment, 207

GEE, Dr. S.:
Clinical Lecture on Large Heads in Children. Delivered in St. Bartholomew's Hospital, June 4th, 1880, 442

GOULD, Mr. A. P.:
Clinical Lecture (part of a) on the Radical Cure of Varicocele by the Galvanic Ecraseur. Delivered at the Westminster Hospital, July 3rd, 1880, 83

GREENFIELD, Dr. W. S.:
Lectures on some recent Investigations into the Pathology of Infective and Contagious Diseases. Delivered in connexion with the Brown Institution, at the University of London, December, 1879.
Lecture III., 41
The Brown Lectures. Further Investigations on Anthrax and Allied Diseases in Man and Animals. Delivered at the University of London on Dec. 13th, 1880
Lecture I., 965

HOLMES, Mr. T.:
Address in Surgery, delivered at the Meeting of the British Medical Association at Cambridge, 251

HUMPHRY, Dr. G. M.:
Presidential Address, delivered at the Meeting of the British Medical Association, at Cambridge, on Aug. 10th, 1880, 243

JACKSON, Dr. J. H.:
Lecture (part of a) on Auditory Vertigo. Delivered at the National Hospital for the Epileptic and Paralysed, 627

JOHNSON, Dr. G.:
An Address delivered at King's College after the Distribution of Scholarships and Prizes at the Opening of the Winter Session, 180

MACEWEN, Dr. W.:
Clinical Lecture on the Results of Antiseptic Osteotomy for Genu Valgum, Varum, and other Osseous Deformities of the Lower Limb, 480

NORTON, A. T.:
Clinical Lecture on Carcinoma of the Sigmoid Flexure. Delivered at St. Mary's Hospital, 905

PAGET, Sir J.:
An Address on Elemental Pathology. Delivered in the Pathological Section of the British Medical Association, 609, 645

PLAYFAIR, Dr. W. S.:
Address delivered at the Opening of the Section of Obstetric Medicine, at the Meeting of the British Medical Association at Cambridge, August, 1880, 295

POLLOCK, Mr. G.:
Observations on the Treatment of Haemorrhoids by "Crushing," 4

POORE, Dr. G. V.:
Lectures on the Physical Examination of the Mouth and Throat. Delivered to the Junior Class of Clinical Medicine, University College.
Lecture IV., 81
Lecture V., 327
Lecture VI., 369

POWELL, Dr. R. D.:
Clinical Lectures on some Cases of Heart Disease. Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.
Lecture III., 133

SANDERSON, Dr. J. B.:
Introductory Address on the Motives and Methods of Medical Study. Delivered at the commencement of the Winter Session of University College, 365

SOUTHEY, Dr. R.:
Clinical Lecture on the Interdiagnosis of Insensibility from various Causes, 891

STURGES, Dr. O.:
Lecture (Abstract of a) on the Design and Scope of Lectures on the Practice of Medicine, introductory to that Course given at Westminster Hospital, 607

TREVAN, Mr. W. F.:
Lettsomian Lectures on the Treatment of Stricture of the Urethra, Enlarged Prostate, and Stone in the Bladder, with special reference to recent Progress. Delivered at the Medical Society of London, February, 1880.
Lecture III.—Part II., 163

TURNER, Mr. W.:
Address at the Opening of the Anatomical Department in the New Buildings of the University of Edinburgh, 724, 759

YEO, Dr. I. B.:
Clinical Lecture (Abstract of a) on a Case in which numerous Gall-stones were discharged through a Fistulous Opening in the Abdominal Wall. Delivered in King's College Hospital, May 11th, 1880, 203

Ledwich School of Medicine, introductory lecture at, 792
Lee, Dr. E., the infection of phthisis, 798
Leeds, "Russian typhus" in, 71
Lees, Dr. R., the dose and value of calcium sulphide in acne, 495
Leg and foot, congenital deformity of the, 813
Leicester, infant diarrhœa in, 383; summer diarrhœa in, 822
Leith, sewer ventilation at, 903
Lemonade, poisonous, 72
Lens, dislocation of the into the vitreous, 788
Leprosy, 770; case of true Eastern, 493; fish-eating and, 747, 837, 878, 922
Lesseps canal, the, 273
Leucocytes, amœboid movements of the colourless blood-corpuscles in, 702
Lewins, Dr. R., Life and Mind on the Basis of Modern Medicine (review), 500, 569
Lewisham, a self-supporting dispensary at, 563
Life and Mind on the Basis of Modern Medicine (review), 569
Limerick, water-supply of, 515
Lindsay, Dr. W. L., obituary notice of, 915
Ling, Mr. C. A. S., lithotomy, 72
Linton, Sir W., obituary notice of, 699
Lister, Professor, 906; recent honours to, 924
Lister's method, an example of the value of, in a phthisical patient, 935
Listerism, debate on, 376, 907
Lithotripsy, 52, 694; in Bombay, 49
Litho-nephrotomy, case of, 6
Lithotomy, 234, 720
Lithotrity, accident to a, 853; at one sitting, 53, 694
Littlejohn, Dr. H. D., on the compulsory intimation of infectious diseases in Edinburgh, 748
Liver, peritoneal adhesions in tropical abscess of the, death, 341; cancer of, invading stomach, 981
Lloyd, Mr. H. J., Dartmouth as a health-resort, 719
Local authority, a confused, 962
—— Government Board, report of the, 630, 672, 743; reports of medical inspectors of the, 210, 280, 964, 1008
Locomotor ataxy arthropathies, 51; eye symptoms in, 996, 962
Locum tenens, 455; justice to one's, 234; an uncourteous, 949
Lodging-houses, 479
London, watersupply of, 267, 392, 512, 552, 711, 788, 985, 969; fog in, 554; fever hospital, 804; University, 236, 281, 321, 362, 522, 816, 889
Longevity in England, 322
Longmore, Mr. T., introductory address by, at the Army Medical School, 581
Lower Thames Valley sewerage, 589, 627, 997
Lucas, Mr. R. C., Guy's Hospital, 795; on cross-legged paralysis, 1009; on rickets, 1017
Lucas-Championnière, Dr. J., Chirurgie Antiseptique: Principes, Modes d'Application, et Résultats du Pansement de Lister (review), 15
Lunacy Law Amendment Bill, 18
—— law questions, the, and private asylums, 907
—— reports for 1879, 405
Lunatic asylums, 949
Lund, Mr. R., on Removal of the Entire Tongue (review), 631
Lung, puzzling case of cancer of the, 259; primary cancer of, 753; recurrent epithelioma in, ib.; on the diagnosis of cavity in the, 273
Lush, Dr. W. N., treatment of scarlet fever by warm baths, 364
Lymphadenoma, notes of a case of, 377; case of, operation, recovery, 616
Lyons hospital, the, 457
Lyster, Dr. C. E., treatment of stricture, 622

MacCormac, Mr. W., Antiseptic Surgery, Address delivered at St. Thomas's Hospital (review), 15
Macdonald, Dr. J., the late, 241
——, Mr. C. R., placenta prævia and rupture of the uterus, 691
Macdowall, Mr. C., hypodermic injections of morphia in cholera, 636
Macewen, Dr. W., on the results of antiseptic osteotomy for genu valgum, varum, and other osseous deformities of the lower limb, 480; Osteotomy, with an Inquiry into the Etiology and Pathology of Knock-knee, Bow-leg, and other Osseous Deformities of the Lower Limbs (review), 817
McGann, Mr. T. J., remarks on stricture of the urethra in connexion with internal urethrotomy, 728
Macmullen, Dr. E. D., typhoid in India, 557
Mackenzie, Dr. D. J., treatment of phthisis, 938
——, Dr. G. H., the infection of phthisis, and its bearings upon treatment, 939
Macnamara, Dr. T. J., on the anti-malarial action of the chinchona compounds, 165, 353, 396
Macleayne, Dr. R., the sejourne-sac as aid to diagnosis in cases of obstruction of the bowel, with description of an enterotomy tube, 762
Macleay, Dr. T. R., the blood in anæmia, 285
——, Dr. W. C., army medical report for 1879, 115
Macnamara, Mr. R., treatment of stricture, 616, 632
M'Oscar, Dr. J., the Upper Engadine, St. Moritz, 324
Madden, Dr. E. M., "homœopathic practitioners," 757
Madras, fever statistics in, 792
Mahaffy, Rev. J. P., a History of Classical Greek Literature (review), 131
Mamma, colloid cancer of, 92
Manchester, vaccination prosecution in, 49; hospital etiquette at, 470; "sanna" and air, 515; Hospital Sunday Fund, 990
—— Royal Infirmary, 162
Manders, Mr. H., treatment of stricture, 236
Manitoba, the climate of, 963
Margate, sanitary condition of, 500
Marsh, Mr. H., the treatment of chronic inflammatory affections of the joints in childhood, with especial reference to excision, 167
——, Mr. W. J., suprapubic puncture of the bladder, 483
Martindale, Mr. W., Chian turpentine, 558
Martin's Atlas of Obstetrics and Gynæcology (review), 175
Marylebone, the medical officership of, 743
Mason v. Peck, 355
Massachusetts State Board of Health, 515
Masterman, Mr. G. F., the use of the hot vaginal douche, 159; effects of an exclusive meat diet, 562
Mater Misericordiæ Hospital, introductory lecture at, 791
Maternal impressions, 934
Mauer, Dr. J. B., neuralgia, 29
May, Mr. E., diphtheria and its treatment, 629; "wanted a diagnosis," given a suggestion, 931; bronchitis complicated with diarrhœa, 963
——, Mr. R. H., a case of litho-nephrotomy, 6
Mayo, the epidemic of fever in, 71, 110, 396
Meat diet, excessive, effects of, 521, 562
Meath Hospital, introductory lecture at, 791
Median nerve, ganglion wound of the, 878
Medical and surgical statistics, 780
—— assistants, and their religious persuasion, 689
—— charity, an ancient, 241
—— certificates, a county court judge on, 77
—— education, 903, 912, 958, 993
—— ethics, 240
—— indulgences, 948
—— legislation, 960, 703

Medical magistrates, 78
—— officers of health, reports of, 20, 69, 147, 187, 226, 271, 309, 350, 390, 474 511, 554, 630, 668, 709, 743, 787, 830, 868, 908, 951, 991, 1036
—— qualifications, the *Newcastle Chronicle* on, 143
—— reform, the Government and, 221; interest of the licensing bodies in, 803
—— Register, erasure of names from the, 201; accuracy of, 707
—— schools, changes in the, 419

MEDICAL SOCIETIES.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—Serous cysts; Cases of neuralgia dependent upon non-erupted teeth, 941
CAMBRIDGE MEDICAL SOCIETY.—Menorrhagia in old age through emotional disturbance; Diabetes from same cause; Therapeutic uses of hyoscyamine; Secondary pelvic tumour; Gummata in brain, liver, and testicles; Bovine tuberculosis in man, 54
CLINICAL SOCIETY.—Severe laceration of face; Ataxy in several members of a family; Sclerotomy for eyeball tension; Elephantiasis of leg treated by elastic bandaging; Case of epilepsy treated by trephining, 618—Cross-legged progression, owing to double hip anchylosis; Acute intestinal obstruction by hernia through mesentery of a Meckel's diverticulum; Nephro-lithotomy, 696—Stretching of facial nerve for the relief of spasm of facial muscles; Myxœdema; Persistent erythema, 814—Hydro-encephalocele; Varicocele with small testicles; Ulceration of the colon, with hypertrophy and dilatation; Right hemiplegia after scarlatina, 894—Retarded signs in pneumonia; Left hemiplegia with aphasia; Radical cure of web-fingers; Removal of villous growth from bladder, 978
EPIDEMIOLOGICAL SOCIETY.—The continued fevers of India and tropical climates, 53—Sir Joseph Fayrer's inaugural address, 773
MEDICAL OFFICERS OF HEALTH SOCIETY.—Inaugural address by the president, 668—The action of disinfectants on sewage and the living organisms contained therein, 855
MEDICAL SOCIETY OF LONDON.—Recovery from symptoms of organic brain disease, 637—Paralysis of lower limbs, following pelvic abscess, on profuse loss of blood after abortion, 690—Pleurisy with effusion; Aneurism of ascending aorta; Atrophy of the stomach, 734—Tumour of cerebellum; Mitral stenosis; Reduplication of cardiac sounds, 772—Recurrent epistaxis; Diagnosis and treatment of whooping-cough; Pauper lunacy laws and medical relief, 816—Hydrocele; Apoplexy from embolism; Acute hip disease following osteitis of femur; Accident to a lithotrite, 853—Perforation of stomach in hydrochloric acid poisoning; Cerebral embolism; Treatment of genu valgum, 896—Clinical features of pleural effusions, 940—Gastric ulcer; Cancer of liver invading stomach; Intestinal obstruction from contraction of ileal mucous membrane, 980
MIDLAND MEDICAL SOCIETY.—Inaugural meeting, 706
OBSTETRICAL SOCIETY.—Exhibition of specimens; Extra-uterine fœtation; Sixty-seven cases of uterine distortion or displacement, 14—Congenital dislocation of both hips; Rotatory action of the forceps, 772—Pyometra; Hydrocephalus; Anencephalous monster; Maternal impressions; Chorea in Pregnancy; Absence of the vagina; Congenital abnormality of the uterus, 854
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Optic neuritis; Nodular growth on iris; Primary intraocular hæmorrhage, 775—Opacities in vitreous humour following injury; Retinal hæmorrhages and degeneration in scurvy and in idiopathic anæmia; Congenital absence of eyeball; Paralysis of cranial nerves with hemiplegia; Peritony; Eye symptoms in locomotor ataxy, 931
PATHOLOGICAL SOCIETY.—Dilatation of central canal of spinal cord; Procephalus; Fibroid tumour of uterus; Myeloid tumour of tibia; Fatty tumour of larynx; Fatty tumour of scalp; Acute necrosis of tibia; Osteitis of femur; Paralysis of cranial nerves in congenital syphilis; Fracture of coracoid process, 656—Multiple exostoses; Sebaceous tumour of leg; Cancer of lung; Blood in diabetes; Tumour of knee-joint; Recurrent epithelioma in lung; Mucous polypus of umbilicus; Ataxic arthropathy; Hemiatrophia facialis; Telostitis; Morphœa, 732—Congenital deformity of leg and foot; Congenital malformation of heart; Rickets; Cranio-tabes, 813—Osteitis deformans; Adjourned discussion on rickets, 937, 1015
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Basic cavity of the lung treated by paracentesis, 12—Aneurism of the external carotid, in which, after failure of the ligature of the common carotid, the old operation was performed successfully; Abscess in the neck, causing destruction of a large portion of the carotid artery, jugular vein, and pneumogastric nerve, 695—Amœboid movements of the colourless blood-corpuscles in leuchæmia; Nature and treatment of genu valgum, 769—Artificial respiration in new-born children, 861—Hydatids of the liver treated by abdominal section and drainage; Hyperpyrexia after "Listerian ovariotomy," 976
WOLVERHAMPTON DISTRICT MEDICAL SOCIETY.—Inaugural Meeting, 629

Medical study, on the motives and methods of, 505
—— trial at the Antipodes, 283
Medicine, the address in, 345
Medicines, adulterated, 160
Medicine-bottle bags, 777
Medico-Psychological Association, 237
Medulla oblongata, the arciform fibres of the, 142
Membrana tympani, perforation of, from ascaris lumbricoides, 663
Menorrhagia in old age through emotional disturbance, 54
Meredith, Mr. W. A., extra-peritoneal ovariotomy, 297
Meryon, Dr. E., obituary notice of, 838
Metropolitan Asylums Board, 909
—— Drinking Fountains Association, 226
—— Free Hospital, 35
—— police court, a, 588
Mickle's General Paralysis of the Insane (review), 942
Micro filariæ, 25
Mid-Cheshire, libel on the medical officer of health of, 226
Middlesex Hospital, 580
Midland Medical Society, 700
Midwifery, antiseptic, 497, 641, 719, 831
Midwives, death certification by, 226
Military prisons, our, 606
Milk, from phthisical cows, danger of, 228; adulteration of, 513; infected, and diphtheria, 879; and water, 631
Milk-supply of the metropolis, 711
Miller, Dr. J. R., "running" impulse in epilepsy, 323
Miller's Elements of Chemistry (review), 301
Mills, Mr. J., on watching the pulse during the administration of chloroform, 92
Milne, Dr. I. K., coated pills, 523
Mines, accidents in, 197

MIRROR OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

ALNWICK INFIRMARY.—Extensive laceration of both forearms with fracture of the bones; recovery, 937
ALTRINGHAM HOSPITAL.—Stone in the bladder; lithotrity, with evacuation; cure, 541
ASHBURTON AND BUCKFASTLEIGH COTTAGE HOSPITAL.—Plastic operation for contracting cicatrix, 617—Chronic effusion into bursa patellæ and bursa ligamentæ patellæ; communication between the two bursæ, 813
BIRKENHEAD BOROUGH HOSPITAL.—Traumatic cardiac hernia, 261
BIRMINGHAM QUEEN'S HOSPITAL.—Compound comminuted fracture of the humerus; Listerism; recovery, 708—Wound over the patella; Listerism; recovery, ib.
BURRA BURRA HOSPITAL, S. AUSTRALIA.—Double empyema treated by excision and aspiration; recovery, 617
CHARING-CROSS HOSPITAL.—Rupture of axillary artery during reduction of luxation of the humerus; diffuse traumatic aneurism; amputation at the shoulder-joint; death; remarks, 260
CROYDON GENERAL HOSPITAL.—Ovariotomy; recovery, 378
DUNDEE ROYAL INFIRMARY.—Three cases illustrating the difficulties of recognising internal cancer, 540
EDINBURGH WESTERN DISPENSARY.—Cases from the throat department; remarks, 340
FULHAM SMALL-POX HOSPITAL.—Two fatal cases of hæmorrhagic variola; necropsies, 850
GLASGOW ROYAL INFIRMARY.—Introduction of a tracheal tube through the mouth for the administration of chloroform during an operation for the removal of epithelioma from the mouth and fauces, 813
GREAT NORTHERN HOSPITAL.—Inward compound dislocation at the ankle-joint, with fracture, 935; fistula, ib.
GUY'S HOSPITAL.—Ruptured hæmatocele of the tunica vaginalis; incision; castration; recovery; remarks, 290—Encysted hæmatocele; incision; recovery, ib.
KASHMIR MISSION HOSPITAL.—Dislocations of the hip-joint, 655—Obstruction of the bowels caused by large worms; Amussat's operation; death, 893
KENDAL COTTAGE HOSPITAL.—Congenital atresia of the vagina, 10
KING'S COLLEGE HOSPITAL.—Left-sided epileptic hemiplegia and aphasia; recovery, 730
LEEDS GENERAL INFIRMARY.—Cases of injury to the eye, 131—Aphasia following injury to the head, 851
LINCOLN COUNTY HOSPITAL.—Case of cancer of the rectum; colotomy; recovery, 98—Cases illustrating use of plaster-of-Paris bandage in hip-disease, ib.
LIVERPOOL NORTHERN HOSPITAL.—Disease of rectum (syphilitic); stricture; colotomy; death after six weeks, from exhaustion, 731
LONDON HOSPITAL.—An unusual case of lameness; operation; cure, 340—Ovarian dysmenorrhœa, with retroflexion of the uterus; symptoms demonstrated to be unconnected with the retroflexion, 892
LIVERPOOL ROYAL INFIRMARY.—Case of Diabetes presenting peculiar features, 172
LUXOR HOUSE OF HEALTH.—Large tumour in the right temporal region; removal; recovery; remarks, 173
MANCHESTER ROYAL INFIRMARY.—Case of locomotor ataxy with arthropathies, 51—Aneurism of the left superficial femoral artery; ligature of the external iliac; hæmaturia; incision into the sac; secondary hæmorrhage; gangrene of toes; recovery, 300—Chronic synovitis of knee-joint; aspiration of joint, 378—Acute suppuration of knee-joint; aspiration, ib.—Apparent typhoid fever; cerebral hæmorrhage; death, 459—Profuse intra-cranial hæmorrhage; intense headache; vomiting; delirium; absence of hemiplegia; coma; glycosuria; death, 460
MIDDLESEX HOSPITAL.—Tubercular peritonitis in an adult; necropsy; remarks, 498—Case of lymphadenoma; operation; recovery, 616
MORETON-IN-MARSH COTTAGE HOSPITAL.—Ovariotomy; recovery, 216
NEWARK HOSPITAL.—A case of quassia poisoning, 260—Opium poisoning; recovery, 654—Fracture of inner condyle of right humerus; perfect union, 769
NEWCASTLE-ON-TYNE INFIRMARY.—Cerebellar tumour; necropsy, 895
ST. GEORGE'S HOSPITAL.—Dislocation of the femur into the sciatic notch in a man seventy-two years old; reduction seventy-two days after the injury, 130—Epithelioma of the rectum removed after a new plan without injuring the sphincter ani; recovery, 540—Soft cataract in one eye, and a high degree of myopia in the other, both recent, 705—Dislocation of the lens into the vitreous, ib.
ST. MARY'S HOSPITAL.—Two cases of antiseptic surgery, 51
ST. PANCRAS WORKHOUSE INFIRMARY.—A successful case of ovariotomy, 139
ST. THOMAS'S HOSPITAL.—Surgical cases, 171—Tracheotomy in a child under six months old; recovery, 849
SAMARITAN FREE HOSPITAL.—Cases of ruptured perineum, 458
SEAMEN'S HOSPITAL, GREENWICH.—Two cases of obscure nervous disorder, 693
SHANGHAI GENERAL HOSPITAL.—Peritoneal adhesions in tropical abscess of the liver; death; remarks, 341
SHEFFIELD GENERAL INFIRMARY.—Contused wound of knee-joint; suppuration; recovery, 379—Knee-joint disease; excision; recovery, ib.—Compound comminuted fracture of thigh; recovery, 499
SOUTH STAFFORDSHIRE HOSPITAL.—Scirrhus of the breast in the male, 216—Scirrhus of the perineum, with cancerous infiltration of the subperitoneal glands, 975
STAMFORD AND RUTLAND INFIRMARY.—Lithotrity, with rapid evacuation (Bigelow's method); two sittings; cure, 52
SUSSEX COUNTY HOSPITAL.—Lithotrity at one sitting, 694
TOTARA DISTRICT HOSPITAL, ROSS, NEW ZEALAND.—Hydatids of liver; ascites; multiple abscesses; death, 11—Hydatids of right lung; obstinate dry cough; formation of white fibrinous clot in heart; death, ib.
TOXTETH PARK WORKHOUSE INFIRMARY.—Hæmorrhage into the spinal cord, 694—Aneurism of the arch of the aorta, ib.
TYRONE COUNTY INFIRMARY.—Strangulated femoral hernia; operation without opening the sac; rapid recovery, 499
UNIVERSITY COLLEGE HOSPITAL.—Repeated expectoration of hydatid membrane; no physical signs of hydatid disease either in the chest or abdomen, 10—Case of cancer of the uterus treated by Chian turpentine, 92—Paralysis of the left vocal cord, 654—Extensive epithelioma of the lower jaw and floor of the mouth; removal; satisfactory state two

years after, 812—Amputation of both upper limbs; recovery, 996—Rupture of central portion of extensor tendon of right thigh, just above patella, the lateral expansions from the vasti muscles being intact and the knee-joint unopened, 937
VICTORIA DOCK DISPENSARY.—Malformation of the heart and abscess of the brain; unusual contents, 768
WANDSWORTH INFIRMARY.—Case of purpura hæmorrhagia; death, necropsy, 1014
WEST LONDON HOSPITAL.—Hæmorrhagic diathesis; hæmorrhage from the mouth; death, 377
WESTMINSTER HOSPITAL.—Pylephlebitis; rigors simulating ague, 215—Progressive wasting; rigors; cessation of spleen, ib.—Galactocele; incision; cure, 250—Iliac abscess treated antiseptically; cure, 974
WEST NORFOLK AND LYNN HOSPITAL.—Colloid cancer of mamma, 52

Mississippi, fever on the, 780
Mitral stenosis, 772
Moinet, Dr. F. W., abstract of introductory address delivered at the opening of the winter session of the School of Medicine, Surgeon's Hall, Edinburgh, 729
Money v. alcohol, 921
Moorhouse Mr. W., obituary notice of, 630
More, Dr. J., case of traumatic tetanus, 652
Morgue, the, 620
Morphœa, 734
Morris, Mr. H., treatment of stricture, 556; Guy's Hospital, 631; on Chian turpentine and its uselessness in cancer, 844, 886
Mortmaine, 554; private, 769
Mouth and throat, on the physical examination of the, 81, 337, 389
Mullingar, sanitary condition of, 394
Municipal morality, 37
Municipality of London Bill, 27
Murray, Dr. G. S., the hot vaginal douche, 119; Dr. Tanner's fast, 199; foul dust-bins, 563
——, Dr. W. H., the use of impure materials in erecting buildings, 787
——, Surgeon C. H., death of, 278
Muscle, termination of nerves in, 887
Muscular contraction, secondary, 940
Museums, educational value of, 386
Music, the influence of, on the circulation of the blood, 707; as a therapeutic agent, 794
Myxœdema, 615; two cases of, 490

Nails, transverse furrows on the, 40
Napier, Mr. W. D., "dental surgeons," "surgeon-dentists," 749
Nasal bones, fracture of, 65
National Eye and Ear Infirmary, Dublin, 796
—— Hospital for the Paralysed and Epileptic, 158
Naval medical service, 33, 141, 194, 241, 284, 308, 467, 781, 887
Neale, Dr. R., a chemical lung, 389
Neck, abscess in the, causing destruction of a large portion of the carotid artery, jugular vein, and pneumogastric nerve, 638
Neill, Dr. C., effects of the inhalation of pure nitrogen gas, 557
Nellson, Miss, the late, 342, 434
Nephro-lithotomy, 698, 703
Nervous disorder, obscure, two cases of, 692
Neuber's bone drainage-tubes, 496
Neuralgia, 28; dependent on non-erupted teeth, 941; as a warning, 987
Neurologie, Archives de (review), 461
Neuronal palpitation, 863
Newcastle-on-Tyne, medical matters at, 786; infirmary, 638
NEW INVENTIONS.—Calvert's carbolic-acid fumigator, 16—A flushing-pail, ib.—Medical and surgical bed-rests, 67—Dr. Radcliffe Crocker's urine-case, ib.—A steam antiseptic spray-producer with inflax-pump, 120—The universal invalid tubular water or air-bed, 219—Goodis's patent mattress, ib.—Day's splint for hip-disease, 364—Exploring aspirator, 382—Hall's patent ventilator and chimney-cowl, 462—A new operating-table, 621—Improved regulating digitorum, ib.—The ladies' sanitary towel, ib.—New carbolic hand spray producer, 777—The "Crown Jewel" stove, ib.—"Vegetable-wool" goods, ib.—Medicine bottle bags, ib.—The aromatic and deodorising water-closet, 899
New Sydenham Society, the, 324
—— York State Board of Health, 20
—— Zealand, medical practice and ethics in, 404, 523; infant diarrhœa in, 457
Newth, Dr. A. H., "wanted a diagnosis," 931
Nicholls, Mr. J., contem in cancer, 556
Nine Elms accident, the, 686
Nitric acid test, the, 406
Nitrogen gas, effects of the inhalation of, 557
Nitrous oxide gas, administration of, 78; as an anæsthetic in squint operations, 811
Niven, Dr. J., preliminary education, 389
Nixon, Dr. C. J., the epidemic of fever in Swineford Union (County Mayo), 286
North Dublin Union, 159, 186
North-Eastern Hospital for Children, 678
North Ormesby, health of, 953
Norton, Mr. A. T., on carcinoma of the sigmoid flexure, 996
Noxious vapours, 191
Nurses for the sick poor, 879, 963
Nursing, and nursing, 97; not a craft or a profession, 946; instruction in, 959
Nutrizine, 908, 1006

Ober-Ammergau, sanitation at, 899
OBITUARY.—John Harrison, F.R.C.S., 34—Wm. Joy, M.R.C.S., L.S.A., ib.—Professor Paul Broca, 153—Stephen H. Ward, M.D., 154—S. B. Gwynn, F.R.C.S., 195—Albert J. Walsh, F.R.C.S.I., ib.—William White Williams, M.D., F.R.C.P., 321—Professor Dr. Ferdinand R. v. Hebra, 361—Henry Francis Burdett, M.R.C.S., 403—William O'Connor, M.D. &c., 479—Edward Amphlett, M.A., M.R. Cantab., F.R.C.S. Eng., ib.—Deputy Inspector-General John Stirling, M.D., M.R.C.P., L.R.C.S. Edin., 490—J. C. Hirschfeld, M.B., A.M., of Banff, ib.—James Simpson, M.D. Aberd., ib.—The Honourable John Imray, M.D., 509—William Moorhouse, M.R.C.S., L.R.C.P. Ed., 630—Sir Wm. Linton, K.C.B., ib.—J. Pearson Irvine, M.D., F.R.C.P., 676—Dr. Edward Isaac Sparks, 715—Deputy Inspector-General Edward Goodeve, M.B., Q.H.P., 752—Edwin Hearne, J.P., M.B. Lond., F.R.C.S., ib.—Thomas Hopgood, M.R.C.S., 753—Dr. William Aitken, Deputy Surgeon-General, Madras Army, 795—Edward Meryon, M.D., F.R.C.P., 833—James Smith Walters, Esq., F.R.C.S., ib.—Mr. Henry Bateman, F.R.C.S. Eng., 974—Dr. Alfred Hudson, ib.—Surgeon-Major Bryden, Bengal Army, 975—Dr. William Lauder Lindsay, 976—Robert Cosly, F.R.C.S., 998; Mr. Frank Buckland, 1038
Obstetric medicine, presidential address in the section of, 295
O'Connor, Dr. W., obituary notice of, 479
Oeynhausen, 914
O'Neill, Dr. W., pauses in respiration, 691
——, Son, and Thompson, Messrs., a new instrument for cleft palate, 241
One-portal system, the, 270
Operating table, a new, 841
Ophthalmological Society for Great Britain and Ireland, 29, 740
Ophthalmology and its bearings, the study of, 471
Opium-eating, treatment of, 341
Opium-poisoning, recovery, 654
Optic nerve, a spinal root of the, 983; and ciliary nerves, experiment I division of the, 508
—— neuritis, 775
Orbit, a rare occurrence following on injury to the outer side of the, 717
Ord, Dr. W., introductory address by, 577
Orlebar, Dr., presentation to, 907
Ormerod, Mr. F., Chian turpentine in cancer, 233
Osteitis deformans, 937
Osteotomy, antiseptic, in operation on the lower limb, results of, 460
Outrage, a strange, 944
Ovarian dysmenorrhœa, with retroflexion of the uterus, symptom demonstrated to be unconnected with the retroflexion, 892, 1031
Ovariotomy, successful cases of, 150, 216; report of the first case of, in Barbadoes, 339; extra-peritoneal, 297
Ovules, migration of, 473
Owens College, 1039

Paddington, scarlet fever in, 669
Page, Mr. H. W., colour-blindness, 153
Paget, Sir J., elemental pathology, 603, 645
Paget's disease of the nipple, 193
Paracentesis, basic cavity of the lung treated by, 12
Paraffine, poisoning by, 730
Paralysis of lower limbs, following pelvic abscess, on profuse loss of blood after abortion, 699
PARIS.—A plug removed from the rectum, 33—The disturbances at Montpelier, 34—Vaccination in France, 74—Interesting case of small-pox, ib.—The Legion of Honour, 153—M. Marey on the pneumograph, ib.—The atmosphere of Paris, 195, 550.—Prizes, ib.—High death-rate, 234—Professor Parrot on rickets, ib.—A fasting case, ib.—Reform in dentistry, ib.—Provision for the families of medical men, 279—The case of M. Amagat, 280—A mode of spreading ringworm, ib.—Bromide of ethyl, ib. Festicential smells, 360, 639—Removal of a tumour of the mesentery, 361—M. Jules Guérin and M. Pasteur, 549, 597, 630—M. Dujardin-Beaumetz on xylotherapy, 596—M. Pasteur's experiments, 730—Illness of the Hon. A. Herbert, 831—Strike among the experts in the law courts, ib.—Brown-Séquard on cutaneous anæsthesia, 873—Society for the Promotion of Cremation, 914—Dr. Landouzy on the arrest of cough of phthisical patients, ib.—Cold baths in rheumatism, ib.—M. Verneuil on cancer of the tongue, 957—Careless dispensing, ib.—Rough treatment of a hospital patient, ib.—Nerve-stretching, 996
Paris, the sewage of, 150; medical night service in, 527; puerperal mortality in, 889
Parker, Mr. S. W., treatment of genu valgum, 616
——, Mr. W. D'E., THE LANCET Commission on workhouse infirmaries, 34
Parkes Museum, the, 186, 181, 230, 930, 966
Parliament, medical notes in, 34, 75, 116, 154, 195, 234, 280, 330, 361, 491, 479
Parliamentary session, the penal prolongation of the, 305
Pasteur's inoculations, 783, 913
Patella, wound of the, Listerism, recovery, 769
Pathological Society of London, 325
Patients, considerateness in, 835; gratitude, 305, 484
Paulsen, Mr. W., antiseptic midwifery, 861
Pauper lunacy laws, and medical relief, 917
Pavy, Dr. F. W., copper test-pellets for sugar, 67; Regina v. Ingle, 318; the situation at Guy's, 714
Pay hospitals, 884
Peacock, Dr. T. B., brief notes of a voyage to Brazil, 393; on a case of malformation of the heart, 530
Peiess, Mr., death of, 708
Pellagra, 514
Pelvic tumour, secondary, 55
Pennsylvania Hospital, the, 675
"People's Dispensary," the, 473
Pepper, Mr. A. J., the anatomy and surgery of the peritoneum, 493
Perambulators, 242
Perinephritis in children, 551
Perineum, cases of ruptured, 469; cirrhus of the, with cancerous infiltration of the subperitoneal glands, 975
Peritoneum, anatomy and surgery of the, 493
Peritonitis, tubercular, in an adult, 498
Peroxide of hydrogen, 495; as an antiseptic, 849, 889
Perthshire Medical Association, 678
Peruvian bark, 284
Pharmaceutical Society of Ireland, 716
Pharmacology and therapeutics, 777
Pharmacy, a question in, 643; Act, limited liability companies and the, 900
Pharynx, syphilitic ulceration of the, 340
Phthisis, the infection of, 726, 793, 870, 899; the production of phthisis by inhalation, 960; treatment of, 956
Physicians' attire, 159
Physiology, address in, 297
Pills, coated, 561
Pilocarpin, action of, on the pupil, 779
Pirogow jubilee, the, 629
Placenta prævia and rupture of the uterus, 601
Plague, in Astrakhan, the French report on, 694; in Russia, 954
Plastic operations, 172
Playfair, Dr. W. S., address delivered at the opening of the section of obstetric medicine, at the meeting of the British Medical Association at Cambridge, 295; the Science and Practice of Midwifery (review), 696
Pleural effusions, the clinical features of, 940
Pleurisy with effusion, 734
Plymouth, proposed sanitary hospital at, 360; and Devonport, a convalescent home for, 333
Pneumonia, retarded signs in, 978
Poet's lament, a, 939
Police, health of the, 471; stations, deaths in, 863
Pollock, Mr. G., observations on the treatment of hæmorrhoids by crushing, 1
Poona pondrette, 190
Poor-law medical officers, reports of, 391; and medical relief, 939; and commissions of the peace, 404
Poore, Dr. G. V., on the physical examination of the mouth and throat, 81, 337, 389
Poplar Hospital, 36
Population of the earth, 549
Poroplastic jackets, 962
Porter, Mr. F. T., dental surgeons, 836
Portuguese mortality statistics, 273
Possilpark, enteric fever at, 149
Post-mortem examinations, 143
Potato, the, 150, 295
Powell, Dr. R. D., on heart disease, 123
Power, Mr. W. H. T., the east wind in respect to health, 756
Practice of medicine, design and scope of lectures on the, 607
Pranti, Dr. D. K., Elementary Botany (review), 16
Preliminary education, 360, 513
—— scientific examination, the, 62
Premature labour induced by quinine, 616
Preston, mortality statistics of, 230; health of, 953
Pricketi, Dr. M., an unusual case of congenital syphilis, 973
Priestley, Mr. C. B., sanitary work, 903
Prison, deaths in, 62, 152; dietary, 549
Privies and sewers, a tax on, 318
Provident dispensaries, 503, 907; work and pay in, 400

Psychology, presidential address in the section of, 292
Pterygium, application of calomel dust in the treatment of, 836, 912
Public conveniences, 940
—— Health (Ireland) Act Amendment Bill, 110
—— institutions, the unhealthiness of, 554
Puerperal fever, on the treatment of, 669, 721
Pullin, Dr. T. H. S., high-heeled boots and shoes, 983
Pulmonary reflexes, 950
—— vaso-motor system, the, 948
Purcell, Dr. F. A., removal of the right lobe of the thyroid, 339
Purpura hæmorrhagica, 1014
Pye, Mr. W., introductory address at St. Mary's Hospital, 542
Pylephlebitis, rigors simulating ague, 215
Pycocephalus, 656
Pyometra, 854
Pyrmont, 832

Quackery, legalised, 143; and low charges, 241, 522, 561, 600
Quarterly Journal of Microscopical Science (review), 175
Quassia poisoning, 260, 495
Queen's College, Belfast, 302; Cork, 556; Galway, 472
—— University, Ireland, 117, 500, 627, 676, 716, 862, 999
Queensland, official mortality statistics in, 199; typhoid in, 790; excessive mortality among South-Sea Islanders in, 911
Queenstown water-supply, 542
Quinine in acute rheumatism, 30

Rabies, 950; in Ireland, 907
Railway accidents, provision for the relief of sufferers in, 365
—— company, action against a, 270
—— travellers, drink for, 199
Ralfe, Dr. C. H., observations in urinary pathology and therapeutics, 86, 127; Demonstrations in Physiological and Pathological Chemistry (review), 807
Ranking, Dr. G. S., enteric fever in tropical climates, 194, 358
Rattlesnake bite, a, 550, 706
Rockitt, Mr. J. D. T., quassia poisoning, 495
Rectum, cancer of the, colotomy, recovery, 92; epithelioma of the, removed after a new plan without injuring the sphincter ani, recovery, 540; disease of (syphilitic), stricture, colotomy, death, 731
Redwood, Dr. T. H., case of popliteal aneurism, 600
Regina v. Ingle, 203, 265, 318, 356
Relapsing fever, eye and ear diseases in, 947
Rendle, Mr. W., Guy's Hospital, 307, 464, 913
Reptile, a gigantic, 234
Resorcin, 777
Respiration, pauses in, 691; artificial, in new-born children, 851

REVIEWS AND NOTICES OF BOOKS.

Chirurgie Antiseptique: Principes, Modes d'Application, et Résultats du Pansement de Lister; deuxième édition: par le Dr. Just Lucas-Championnière, 16 — Antiseptic Surgery; Address delivered at St. Thomas's Hospital: by Wm. Mac Cormac, F.R.C.S.E. and I., ib. — An Elementary Text-book of Botany; translated from the German of D. K. Prantl; the translation revised by S. H. Vines, D.Sc., F.L.S., 16—The Watering-places and Mineral Springs of Germany, Austria, and Switzerland: by Edward Guttmann, M.D., ib. — Army Medical Department Report for the year 1878; Vol. XX. (second notice), 55—Atlas of Histology: by E. Klein and E. Noble Smith, 56, 775—The Hysterical Element in Orthopædic Surgery: by Newton M. Shaffer, M.D., 92 — Elements of Modern Chemistry: by Adolphe Wurtz; translated and edited from the fourth French edition by Wm. H. Greene, M.D., ib. — A History of Classical Greek: by the Rev. J. P. Mahaffy, M.A., 131—De la Méthode Sanglante dans les Rétrécessements de l'Uréthre: par le Dr. W. Grégory, 174 — Précis Clinique des Affections des Voies Urinaires chez l'Homme; tome I.; par le Dr. Christian Smith, ib. — The Pathology and Treatment of Venereal Diseases: by F. J. Bumstead, M.D.; fourth edition, revised by the Author, and by Robt. W. Taylor, M.D., ib.—Bristol Royal Infirmary Reports; Vol. I., 1878-79, 175 — Martin's Atlas of Obstetrics and Gynecology; translated by Fancourt Barnes, M.D., ib. — The Quarterly Journal of Microscopical Science, Nos. LXXVIII. and LXXIX., ib. — Lessons in Gynecology: by Wm. Goodell, M.D., 217—On Aneurism, especially of the Thorax and Root of the Neck: by Richard Barwell, F.R.C.S., ib. — Contributions to Orthopædic Surgery, including Observations on the Treatment of Chronic Inflammation of the Hip, Knee, and Ankle-joints by a new and simple method of Extension, and Lectures on Club-foot: by James C. Hutchinson, M.D., 261—House Architecture: by J. J. Stevenson, F.R.I.B.A., ib. — The Therapeutics of Gynecology and Obstetrics: by W. B. Atkinson, M.D., 262 — Transactions of the American Gynecological Society; Vol. IV., 1879, ib. — Elements of Chemistry, Theoretical and Practical; fifth edition: by William A. Miller, M.D.; revised, and in great part rewritten, by H. E. Armstrong, Ph.D., F.R.S., and C. E. Groves, F.C.S., 303 — The Riviera: by Edwd. I. Sparks, B.M. Oxon., 342 — On Deafness, Giddiness, and Noises in the Head; second edition: by Edwd. Woakes, M.D. Lond., 343 — Cours de Thérapeutique, professé à la Faculté de Médecine: par Adolphe Gubler, 380—Headaches; their Nature, Causes, and Diagnosis; third edition: by Wm. Henry Day, M.D., 381 — On Preservation of Health in India: by Sir Joseph Fayrer, K.C.S.I., &c., 382 — The Utricular Glands of the Uterus, &c.: by Prof. Recolani; translated under the direction of H. O. Marcy, M.D., 460 — The Diagnosis of Diseases of the Spinal Cord; an Address delivered to the Medical Society of Wolverhampton, Oct. 9th, 1879: by W. R. Gowers, M.D., 461—Archives de Neurologie. No. I., ib. — Practical Lithotomy and Lithotrity; or an Inquiry into the best modes of Removing Stone from the Bladder; third edition: by Sir Hy. Thompson, F.R.C.S., 499 — Leçons Cliniques sur l'Uréthrotomie Interne faites à l'Ecole pratique de la Faculté de Médecine de Paris: par le Dr. Delefosse, et recueillies par E. Ploger, ib.—Fracture of the Patella; a Study of 127 Cases: by Frank H. Hamilton, M.D., 500—Life and Mind, on the Basis of Modern Medicine: by Robert Lewins, M.D.; edited by "Thalassiopiektos," ib. — Hygiene and Treatment of Catarrh: by Thos. F. Rumbold, M.D., 541 — Alcohol Tables, founded on the Tables of Fownes and Drinkwater: by Otto Hehner, F.C.S., 542 — Tables for the Analysis of a Simple Salt; for use in School Laboratories: by A. Vinter, M.A., ib. —Lectures on Digestion; an Introduction to the Clinical Study of Diseases of the Digestive Organs: by Dr. C. A. Ewald; translated by Robert Saundby, M.D., 620 — Oar Library Table, 621, 943 — On Atrophy of the Stomach and the Nervous Affections of the Digestive Organs: by Samuel Fenwick, M.D., F.R.C.P. Lond., 659 — An Atlas of Human Anatomy: by Rickman John Godlee, M.S., F.R.C.S., 660 — Anatomy, Descriptive and Surgical: by Henry Gray, F.R.S.; ninth edition, by T. Holmes, M.A. Cantab., ib.—Spirit Gravities, with Tables: by Thomas Stevenson, M.D. Lond., ib.—A Text-book of the Physiological Chemistry of the Animal Body, including an Account of the Chemical Changes occurring in Disease: by Arthur Gamgee, M.D., F.R.S.; Vol. I., 700 — Diseases and Injuries of the Eye; fourth edition: by George Lawson, F.R.C.S., 701—The Royal London Ophthalmic Hospital Reports: edited by John Tweedy, F.R.C.S.; Part I., Vol. X., 736 — The Dissector's Guide: by D. J. Cunningham, M.D., C.M., F.R.S.E.; Part II., The Abdomen, ib. —The Ocean as a Health-Resort: by W. S. Wilson, L.R.C.P., M.R.C.S., ib. — Malaria; its Cause and its Effects: by E. G. Russell, M.B., B.Sc., 776 — Practical Histology and Pathology: by Heneage Gibbes, M.B., ib.—Osteotomy; with an Inquiry into the Etiology and Pathology of Knock-knee, Bow-leg, and other Osseous Deformities of the Lower Limbs: by William Macewen, M.D., 817—Index-Catalogue of the Library of the Surgeon-General's Office, United States Army; Authors and Subjects: Vol. I., A—Berlinski, ib. — The Practitioner's Handbook of Treatment; second edition: by J. M. Fothergill, M.D., 856—A Practical Treatise on Tumours of the Mammary Gland, embracing their Histology, Pathology, Diagnosis, and Treatment: by Samuel W. Gross, M.D., ib.—Demonstrations in Physiological and Pathological Chemistry: by Chas. H. Ralfe, M.D., 897—The Atomic Theory: by Prof. Ad. Wurtz; translated by E. Cleminshaw, M.A., F.C.S., 898—The Science and Practice of Midwifery; third edition: by W. S. Playfair, M.D., ib.—Croonian Lectures on some Points in the Pathology and Treatment of Typhoid Fever: by William Cayley, M.D., 942—General Paralysis of the Insane: by Wm. Julius Mickle, M.D., ib. — Conspectus of Organic Materia Medica and Pharmacal Botany: by L. E. Sayre, Ph.G., 943 — St. Thomas's Hospital Reports; New Series, Vol. X., 982 — St. George's Hospital Reports; Vol. X., ib.—Surgical Enquiries; second edition: by Furneaux Jordan, F.R.C.S., 983—An Introduction to the Study of Fishes: by A. C. L. G. Günther, M.A., M.D., 1020
Reynolds, Mr. J. J., Notes on Diseases of Women (review), 621
——, Mr. L. W., perforation of membrana tympani from eczema lumbricoides, 668
Rhubarb, a paradise of, 756
Rheumatism, acute; blister treatment of, 73; treated by hot washing-soda baths, 199; new theory as to the pathological changes in the blood in, 763
Richardson, Dr. B. W., and the London School Board, 1036
Richmond Hospital, introductory lecture at, 793
Rickets, on, 807, 914, 930, 988, 1015; infantile, 836
Ridge, Dr. J. J., the British Medical Temperance Association at Bristol, 788
Ringer and Murrell, Drs., glycerine in flatulence, acidity, and pyrosis, 6
Ringworm, scarf in, 119, 150
Rivers Pollution Prevention Bill, 188
Rivington, Mr. W., cases of aneurism illustrating difficulty in diagnosis and the use of Esmarch's bandage, 606, 684
Rix, Mr. W. R., treatment of scarlet fever by warm baths, 404
Roberts, Mr. C., nature's plan in the determination of the sexes and the hereditary transmission of physical and mental qualities, and the acquisition of new ones, 926
Roberts' Clinics Oftalmologica (review), 944
Robertson, Dr. W. H., salicin and the salicylates in rheumatic fever, 192
——, Mr. F. M., treatment of scalp wounds, 201
Robinson, Mr. T., cerebro-spinal meningitis, death and autopsy, 613
Rogers, Dr. J., the poor-law medical service and commissions of the peace, 404
Rötheln, note on an outbreak of, 199
Rotherhithe, 119
Roxburgh, Dr. R., Guy's Hospital, 235
Royal College of Physicians of London, 180; pass-lists of, 76, 230; the license of, 470
—— College of Surgeons of England, the, 75, 99, 223, 232, 270, 477, 677, 795, 822, 948; election of Council, 21; examination of, 27, 78, 201, 835, 920, 962, 989; pass-lists of, 35, 76, 117, 155, 196, 291, 716, 795, 833;—of Edinburgh, pass-lists of, 117;—of Ireland, 989; pass-lists, 231, 875; introductory lecture at the school, 791
—— Hospital for Incurables, 907
—— London Ophthalmological Reports (review), 736
—— Military Academy, 913
—— Society, 796
—— University of Ireland, 25
Rubeola, cases of, 452; temperature in, 963
Rumbold, Dr. T. F., Hygiene and Treatment of Catarrh (review), 541
"Running" impulse in epilepsy, 333
Russell, Dr. E. G., Malaria, its Cause and Effects (review), 776
Russia, medico-sanitary news from, 39; medical news from, 80; diphtheria in, 191, 273, 554, 634, 713, 830, 988; military ophthalmology in, 239; sanitary organisation in, 591; sanitary inspection of schools in, 988
Russian Red Cross Society, 64, 353

Sacrum, fracture of the, 624
St. Bartholomew's Hospital, a year's work at, 709; the staff of, 754
St. George's Hospital Reports (review), 982
St. Helena, quarantine at, 495
St. Katherine, the order of, 472
St. Louis, sanitary work in, 630
St. Mark's Hospital, 110
—— Ophthalmic Hospital, 861, 716
St. Mary's Hospital, 35
St. Moritz, 324
St. Petersburg, Institute of Anatomy at, 61; new hospital in, 804; Public Health Society at, 960
St. Thomas's Hospital, 35, 96; paying patients at, 19; Medical School, 635; Reports (review), 982
St. Vincent's Hospital, introductory lecture at, 791
Salewskal, the case of, 153
Salford, hospital provision for infectious disease in, 952
Salicin and salicylate in acute rheumatism, 192
Salicylate of soda poisoning, 778
Sanderson, D. J. H., on the motives and methods of medical study, 585
Sangster, Mr. A., tinea tonsurans accompanied by alopecia areata, 9
Sanitary and Poor-law authorities, a whip for, 351
—— Congress, 510
—— hospitals, removal of patients to, 302
—— Institute of Great Britain, 793
—— myth, a, 631
—— towel for ladies, 621
—— trains in war, 503
Sarcoma, relations of, to carcinoma, 204, 336, 407, 628, 801, 839
Saundby, Dr. R., the administration of anæsthetics, 910
Savory, Mr. W. S., medical education, 913
Sawyer, Dr. J., statistics of fatal chorea, 177

Sayre's Conspectus (review), 943
—— jackets, a method of more effectually securing, 811
Scalp, fatty tumour beneath, 557
Scalp-wounds, treatment of, 188, 201
Scapula, excision of the, 889
Scarlet fever, treatment of, by warm baths, 284, 404; singular freak of an epidemic of, 600; dissemination of, by milk, 627; patients, convalescent home for, 667; isolation of, 959
School-board certificates, 837, 919; fees for, 159; the cost of, 119
—— hygiene, 837
—— schools and scarlet fever, 470
Science (review), 621
Scirrhus of the breast in the male, 316
Sclerotomy, 294, 399; for eyeball tension, 618
Scoffern, Mr. J., poisonous lemonade, 73
Scotch towns, health of, 192
Scurvy in civil practice, 118; retinal haemorrhages and degeneration in, and in idiopathic anæmia, 981
Scylla and Charybdis, 95
Sea-bathing in winter, 757
Seamen's Hospital, 678; Society, 705
Sea-water bathing in London, 560
Seaweed as a substitute for jam, 961, 1004
Serous cysts, 941
Service examinations, 354
Sewer ventilation, 653
Sewers, gauging of, 394
Sewill, Mr. H., dental surgeons, 795, 878
Sexes, nature's plan in the determination of the, 936
Shaffer, Dr. N. M., the Hysterical] Element i in Orthopædic Surgery (review), 93
Sharkey, Dr. S. J., clinical remarks on the diagnosis of the various forms of congenital heart disease, 940, 986
Shattock, Mr. S. G., on rickets, 1039
Sheehy, Mr. W. H., medical ethics, 240
Sheen, Dr. A., five years' surgical work in the Cardiff Infirmary, 833, 913, 966, 784, 928
Sheffield Medical School, 838
—— poisoning case, the, 990
Sheppard, the late Surgeon-Major, 76
Shopwomen, seats for, 395
Sicily, on winter stations in, 125
Sick paupers, 181
Sigerson, Dr., the report of, on the fever in Ireland, 313
Sigmoid flexure, carcinoma of the, 965
Simla, sickness at, 194
Simpson, Dr. J., obituary notice of, 480
Sincock, Mr. J. B., replantation of teeth, 78
Skull, extraction of a bullet from the, 536, 574; two cases of fracture of the base of the, in children aged six years, 676; two cases of fracture of the, in one of which trephining was followed by complete recovery, 806
Slaughterhouses and cowsheds in London, 553
Sleeping girls, 31
Sleeplessness, a plea for the classification and detailed study of mental and sensory causes, or forms of, 333
Sligo water-supply, 953
Small-pox, importation of, 271; two fatal cases of hæmorrhagic necropsies, 850; in London, 867, 900, 962; and small-pox hospitals, 984; and vaccination, Mr. Hopwood's returns, 311
Smiles, Dr. W., Coldbath-fields Prison, 116
Smith, Dr. A., on Ringworm (review), 945
——, Dr. C., Précis Clinique des Affections des Voies Urinaires chez l'Homme (review), 174
——, Dr. E., on catarrh of the stomach in children, 805, 847
——, Dr. E. N., cruelty to women, 120
——, Dr. F. W., treatment of scarlet fever by warm baths, 396
——, Mr. F. P., the use of impure materials in erecting buildings, 837
——, Mr. S. C., notes on the diagnosis of cavity in the lung, 978
——, Professor Goldwin, on doctors, 562
Smith's Visiting List (review), 776
Snake-bite, two fatal cases believed to have resulted from, at Mount Abu, Rajputana, 139; experiments on, 706
Snake-poison, the absorption of, 741
Snell, Mr. S., note on the use of large probes in the treatment of lacrymal obstruction, 170
Snow, Dr. H., etiology of cancer, 1013
Social Science Congress, the, 633
Société Française d'Hygiène, 70
Society for Relief of Widows and Orphans of Medical Men, 156, 676
—— of Medical Officers of Health, 151
South Durham and Cleveland Medical Society, 676
—— London School of Pharmacy, 949
Southam, Mr. F. A., fat embolism in fractures, 47
Southey, Dr. R., on the interdigitation of insensibility from various causes, 861
Spain, medical services in, 929
Sparks, Dr. E. I., the Riviera (review), 342; obituary notice of, 715
Spence, Professor, proposed testimonial to, 194
Spender, Dr. J. K., cautions and safeguards about the climate of the Engadine, 46
Spermatorea, structure of, 144
Sphygmograph, the compound, 59
Spinal cord, regeneration of the, 221; dilatation of the central canal of the, 656; hæmorrhage into the, 694
—— ganglia, multiplicity of the, 369; the cells of the, 708
Spleen, syphilitic enlarged, in a child, 853
Splenic fever, 654
Squire, Dr. R., the dose and value of calcium sulphide in acne, 405
Stanhope House School, poisoning at the, 988
Startin, Mr. J., simulated (or so-called) hysterical eruptions of the skin, 239; a case of true Eastern leprosy, 695; fish-eating and leprosy, 837; a question of treatment, 899
Starvation, amateur, 142, 308
Statistical Society of Ireland, 76
Stertor, further observations on its pathology and treatment, 971, 1019
Stevenson, Dr. T., Spirit Gravities, with Tables (review), 669
——, Mr. J. J., House Architecture (review), 961
Stewart, Dr. T. G., teaching and examinations at the University of Edinburgh, 114
——, Mr. J., Chian turpentine in cancer, 35
Stirling, Dr. J., obituary notice of, 480
Stockwell Hospitals, reports of, 27
Stomach, atrophy of the, 735; catarrh of the, in children, 805, 847
—— and pancreas, on the part played by the, in the digestion of fat, 785
Stone in the bladder, lithotrity, with evacuation, cure, 541
Story, Mr. W., "a note on intention in the determination of sex," 926
Strahan, Dr. S. A. K., strangulated femoral hernia in an insane patient, 946
Strange, Dr. W., medical education, 934
Street improvements, 591
Stricture of urethra, on the treatment of, 102, 206, 478, 516, 555, 596, 674
Stewart, Brigade-Surgeon W. R., death of, 226
Stuart, Dr. A., teaching and examinations at the Edinburgh University, 115
Students, address to, 407
Sturges, Dr. O., registration of disease in hospitals, 78; some statistics of fatal chorea, 84
——, on the design and scope of lectures on the practice of medicine, 607
Suburban dwellings, 513
Suffocating infants, 786
Suggestion, a strange, 561
Suicides in London, 514
Sunday drinking, 306
Sunderland, scarlet fever in, 829
Superannuation Act, the Medical Officers', 351
Surgery, the address in, 251
Surgical Aid Society, the, 949
—— charges, action to recover, 389
—— Society of Ireland, 796
Sutherland, Dr. G. S., two fatal cases, believed to have resulted from snake-bite in India, 139
Swanwick, Mr. E. M., how anti-vaccination statistics are made, 395
Sweetland, the case of, 88, 232
Swineford Union, fever in, 112, 256
Switzerland, dairy-farming in, 191; health of, 911
Symons, Mr., on health resorts, 633
Sympathetic, cross paralysis of the, 742
Syphilis, congenital, paralysis of cranial nerves in, 667; unusual case of, 973

Tabes dorsalis cured by nerve-stretching, 786
Tait, Mr. L., a fifth case of extra-uterine pregnancy treated by abdominal section, 456; Chian turpentine in cancer, 595, 675
Tanner's fast, 164, 199, 270
Taylor, Mr. Tom, death of, 99
Teeth, replantation of, 30, 78, 286
Teevan, Mr. W. F., the excision of obstruction at the neck of the bladder, 73; on the treatment of stricture of the urethra, enlarged prostate, and stone in the bladder, 162, 555, 674
Telestitis, 734
Temperaments, 919
Temperature, the effect of exertion on, 906
Temple, Dr. T. D. L., the dispute at Guy's Hospital, 199
Temporal region, large tumour in the, removal, recovery, 173
Tendon-reflex, 825; as an aid to diagnosis in diseases of the spinal cord, 842, 894
Tetanus, traumatic, 663; treated by chloroform inhalation, recovery, 171
Texas, medical practice in, 189
Thames, pollution of the, 543
Therapeutical problem, a great, 335
Thermo-cautery, the, 35
Thesiger, Lord Justice, 677
Thiers, Madame, the late, 989
Thigh, compound comminuted fracture of the, recovery, 498; rupture of central portion of extensor tendon of, the lateral expansions from the vasti muscles being intact and the knee-joint unopened, 937
Thin, Dr. G., Paget's disease of the nipple, 193; fish-eating and leprosy, 878; and Mr. J. K. Thornton, an example of the value of Lister's method in a phthisical patient, 935
Thomas, Dr. W. R., on irregular gout, with remarks on the pathology of gout, 494
Thompson, Dr. R. E., the infection of phthisis, 728
—— Sir H., Practical Lithotomy and Lithotrity, or an inquiry into the best modes of Removing Stone from the Bladder (review), 499
Thomson's ametrometer, 91
Thoracentesis, 787
Throat, on the association of affections of the, with acute rheumatism, 933, 1042
Thudichum, Dr. J. L. W., note on hæmin, or so-called hydrochlorate of hæmatin, 890
Thyroid, removal of the right lobe of the, 339
Tibia, myeloid sarcoma of the head of the, 856; acute necrosis of the, 857
Time as an element in the appreciation of medical services, 709
Tinea tesserans accompanied by alopecia areata, 9
Tinned food, 349
Tissues, nerve influence on the, 208
Tobacco-smoking, experiments on, 139
Tonga, 921
Tongue, excision of one lateral half of the, present condition of the first patient, operated on in 1865, 689
Tongue-depressor, a, 518
Toys, dangerous, 334
Tracheal tube, introduction of a, through the mouth, for the administration of chloroform during an operation, 813
Tracheotomy in a child under six months old, recovery, 849
Train-catching, 182
Treves, Mr. F., registration of diseases in hospitals, 119; suprapubic puncture of the bladder, 400
——, Mr. W. K., a new method of excising the knee-joint, 33
Trinity College, 634; School of Physic, introductory lecture at, 792
Tubercular deposits in the bowels and peritoneum, 643
Tuberculosis, bovine, in man, 55
Tunica vaginalis, ruptured hæmatocele of the, incision, castration, recovery, remarks, 289
Turin, the Congress of Hygiene at, 269
Turnbull, Dr. J., cancer of the uterus during pregnancy, safe delivery to mother and child, 891
Turner, Mr. W., address at the opening of the anatomical department in the new buildings of the University of Edinburgh, 724, 759
Tydd, Deputy Surgeon-General, death of, 707
Typhoid fever, 74; apparent, cerebral hæmorrhage, death, 489; sudden death in, 549; treatment of, 833; source of, 911
Tyson, Mr. W. J., syphilitic enlarged spleen in a child, 853

Umbilicus, mucous polypus of, 733
United Hospitals Rifle Association, 796
—— States, census enumeration in the, 346; medical education in the, 388
Unqualified medical officers to public institutions, 79
University College Hospital, 988
Urethrotomy, internal, 728
Urinary pathology and therapeutics, observations on, 86, 127
Urine, pathology of the, 703; diabetic, notes on the pathology of, 1042
Urticaria, 906, 485
Uterine distortion and displacement, 14
Uterus, congenital abnormality of the, 835; cancer of the, during pregnancy: safe delivery to mother and child, 891

Vaccination Acts, a Bill to amend the, 25, 60, 94, 115, 142, 178, 226, 239, 271, 310; imprisonments for non-compliance with the, 310; and small-pox in Paris, Dublin, and London, 867
——, animal, 310
——, compulsory, 710
Vagina, congenital atresia of the, 10; absence of the, 854
Vaginal douche, use of the hot, 36, 110, 189
Varicocele, on the radical cure of, by the galvanic écraseur, 83; with small testicles, 884
Variola, human and animal, 374, 453
Vaso-motor action, 407
Vauxhall railway accident, 510
Vegetable wool goods, 777
Ventnor, 631
Verdon, Mr. W., antiseptic midwifery, 407
Veterinary College for Ireland, a, 1035
—— department of the Privy Council, 177
—— pathology, 229
—— surgery, 907

Viceroy, health of the, 949
Vines v. Stuart, 355
Vinter, Mr. A., Tables for the Analysis of a Simple Salt: for use in School Laboratories (review), 542
Virginian prune, the, 97
Vitreous humour, opacities in, 991
Vivisection, 601
Vocal cord, left, paralysis of, 654; paresis of and papillomatous growth on, in a case of pulmonary phthisis, 340
Volunteer Ambulance Department, 635

Wakefield, John, the case of, 269
Wales, education in, 862
Walker, Dr. A., the statistics of anti-vaccinationists, 483
——, Dr. C. E., a rare occurrence following an injury to the outer side of the orbit, 717
——, Mr. S., infant diarrhœa, 601
——, Mr. T. O., singular freak of an epidemic of scarlet fever, 600
Walking, the physiology of, 509
Walsh, Mr. A. J., obituary notice of, 195
Walters, Mr. J. S., obituary notice of, 838
Ward, Dr. S. H., obituary notice of, 164
Warrington, scarlet fever at, 351
Wasp-sting, 520
Wasting, progressive, rigors, excision of spleen, 215
Waterclosets, the aromatic and deodorising, 389
Water, microscopical examination of, 225; pure, the use of, in erecting buildings, 601
Watering-places, mortality statistics of, 311; and their sanitary condition, 756
Waters, Dr. A. T. H., introductory address by, 593
Watson, Mr. T. S., on sclerotomy, 389
Weather, the, 949
Web-fingers, radical cure of, 960
Welbeck, cases of poisoning, 143, 190
Wells, Mr. T. S., cremation or burial, 319
West-end districts, insalubrity of, 482
West of England Sanatorium, 322
Westminster Hospital, 586; the nursing question at the, 636
——, the Duchess of, 144
Wheeler, Dr. J., case of extra-uterine fœtation simulating obstruction of the bowels, 170
Whipham, Dr. T., diphtheria at St. George's Hospital, 618, 686
White, Dr. J. W., on the Mouth and Teeth (review), 944
——, Dr. S., cases of woolsorters' disease, 319
——, Mr. W. H., the dispute at Guy's, 132
Whitechapel, scarlatina culture in, 1036
Whitefoord, Mr. C. C., 797
Whitehall, sanitary condition of, 331
Whittle, Dr. G., "running" impulse in epilepsy, 386
Whooping-cough, treatment of, in gasworks, 705; diagnosis and treatment of, 817
Wickersheimer's method of preserving anatomical preparations and whole bodies, 472
Weeks, Mr. W. C., foreign bodies swallowed by children, 193
Widnes, infant diarrhœa in, 681
Wilkins, Mr. J. S., supra-pubic punctures of the bladder, 328
Willesden, sanitary condition of, 837
Williams, Dr. A. W., ovarian dysmenorrhœa, 1021
——, Dr. C. T., on winter stations in Sicily, 125
——, Dr. H. W., Guy's Hospital, 718
——, Dr. W. W., obituary notice of, 321
——, Mr. C., dermoid tumours of the cornea, 324
——, Mr. W. R., an improved method for exciting the wrist-joint, 933
Wimbledon meeting, the, 193
Wines, THE LANCET Commission on, 17, 145, 606
Wilson, Mr. S., leprosy, 779; unqualified medical officers to public institutions, 79
——, Mr. W. S., the Ocean as a Health Resort (review), 736
Wise, Dr. A., a tongue-depressor, 518
Weakes, Dr. E., a new instrument for the introduction of stitches in operations for cleft palate and other deeply-seated localities, 129, 518; on Deafness (review), 343
Wolverhampton District Medical Society, 630
Women, diseases of, 131, 923
Wood pavement, 354, 1006
Woolsorters' disease, 62, 190; cases of, 319, 389
Woolton Convalescent Institution, 197
Woolwich and Sandhurst, 549
Workhouse infirmaries, THE LANCET Commission on, 35, 76
—— vital statistics, 547
Workhouses, overcrowding in, 69; stimulants in, 144, 836, 893; THE LANCET Commission on, 184; the drainage of, 335, 302
Worthing, enteric fever at, 891
Worthington, Mr. J., case of coin-swallowing, 360
Wound treatment, on the essentials of, 367
Wright, Mr. C. J., introductory address by, 578
Wrist-joint, an improved method for exciting the, 933
Wurtz, Prof. A., Elements of Modern Chemistry (review), 93; the Atomic Theory (review), 686

Yellow fever, 191, 304, 554; on an English ship, 780; and dengue, 830
Yeo, Dr. I. B., on a case in which numerous gall-stones were discharged through a fistulous opening in the abdominal wall, 263; the treatment of asthma by the induced current, 761
Youghal water-supply, 237

Zoological Society, the, 1004

END OF THE SECOND VOLUME FOR 1880.

Printed by Ballantyne, Hanson and Co., No. 4, Chandos-street, Covent Garden.

REPRODUCED

FROM

POOR MATERIAL

VOLUME

I

1881